

**ADMINISTRATIVE RECORD****PUBLIC PARTICIPATION CHECK LIST**FACILITY: Trex Properties, LLC, Melrose Park DATE: January 10, 2014

- X Public Notice
- X Radio Ad and Requisition Form with Payment Voucher
- X Cover Letters (legislators, concerned citizens, etc.)
- X Repository Cover Letter
- NA Press Release or evidence of any other public participation activity
- X Dated Mailing List
- X Newspaper Tear Sheets or Affidavit of Publication and Payment Voucher
- NA* Verification that materials were received by repository location
- NA Public Hearing Transcript or Hearing Record # (if hearing held)
- X Public Comment(s) (Copy of comments or hearing record # where comments may be found)
- NA Response Summary (if appropriate)
- NA Final Permit Issuance or Denial Notice (if any)

ADDITIONAL COMMENTS:

*Repository did not return the verification form. On 1/8/13, MM spoke with Leanne O'Brien, assistant to the Melrose Park Public Library's director, who confirmed late October receipt of the application and draft permit materials.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

IEPA #: LPC 0311860003

Notice #: PB-04-13

U.S.EPA #: ILD074424938

Initial Publication Date: October 31, 2013

PUBLIC NOTICE OF DRAFT HAZARDOUS WASTE PERMIT RENEWAL

The Illinois Environmental Protection Agency (IEPA) hereby gives notice of intent to renew a Resource Conservation and Recovery Act (RCRA) permit held by Trex Properties, LLC for the former Detrex Corporation facility property at 2537 LeMoyne Ave., Melrose Park, IL 60160. The current owner, Trex, has assumed responsibility for performing corrective action at the closed hazardous waste management facility to address solvent releases at the site. (The Trex Properties, LLC corporate address is 1650 Des Peres Rd., Ste. 303, St. Louis, MO 63131.)

The interested public is invited to review a copy of the permit application, draft permit decision and related fact sheet at the **Melrose Park Public Library, 801 Broadway.**

Written comment on the draft permit must be sent to the contact listed below postmarked by midnight **December 16, 2013**. Timely comments will become part of the Administrative Record (AR) and will be evaluated in making the final permit decision. Any public hearing request must be made in writing, state opposition to the draft permit and the nature of issues to be raised at the hearing. Hearing requests must be postmarked by the comment deadline. Commenters will be notified of the IEPA permit decision and appeal process.

The AR (permit application, draft permit decision and all data submitted to the IEPA) is available for inspection by appointment only Mon-Fri, 9:00 a.m.-5:00 p.m. at IEPA's main office:

Mara McGinnis (#5)

Illinois EPA

1021 North Grand Avenue East, P. O. Box 19276

Springfield, Illinois 62794-9276

Phone: 217/524-3288

TDD: 217-782-9143

For further RCRA information, please go to:

<http://www.epa.gov/epawaste/wycd/manag-hw/index.htm>

(One minute ad to air once only on a Melrose Park-area radio station on or soon after October 31, 2013. When the ad is translated into Spanish, please substitute the Agency contact as Mr. Hernando Albarracin at 217-524-2448. Announcer--Please repeat phone # of agency contact if time allows.)

PAID RADIO ANNOUNCEMENT

The Illinois Environmental Protection Agency is considering renewing a hazardous waste management permit for Trex Properties, LLC to continue remedial work at the former Detrex Corporation facility of Melrose Park. The hazardous waste management facility is closed but Trex is required to address soil and groundwater contamination from the previous operations.

The permit application and the Agency's draft permit are now available for review at the Melrose Park Public Library. The Agency is seeking written comments from the interested public before reaching its final decision on the permit renewal. The deadline to submit written comments is December 16, 2013. For further information about reviewing documents and submitting comments, please call Ms. Mara McGinnis at 217-524-3288.

Spanish Translation (edits by Hernando Albarracin):

La Agencia de Protección Ambiental de Illinois está considerando la renovación de un permiso para el manejo de desechos tóxicos para la compañía Trex Properties, LLC. El permiso le permitirá a la compañía la continuación de los trabajos de limpieza en las antiguas instalaciones de la Corporación Detrex en Melrose Park. La compañía cerró sus operaciones del manejo y almacenamiento de desechos tóxicos, pero Trex tiene que cumplir con los requisitos de la limpieza de la contaminación en el suelo y las aguas subterráneas causada por las operaciones antiguas.

La solicitud del permiso y el permiso preliminar de la Agencia están disponibles para el público en la Biblioteca Pública de Melrose Park. La Agencia está solicitando comentarios escritos del público interesado antes de adoptar su decisión final sobre la renovación del permiso. El plazo para presentar comentarios por escrito es el 16 de diciembre de 2013. Para obtener más información acerca de la revisión de los documentos y la presentación de comentarios, por favor llame al Sr. Hernando Albarracin al 217-524-2448.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUEST FOR REQUISITION AND RECEIVING DOCUMENT

Date:

FY: 2013[illegible]

- ☐ Call before attempting delivery.
☐ Request total includes all shipping and handling charges.
☒ Vendor to prepay delivery charges and add to invoice

APPROVALS:

ORDER QUANTITY CERTIFICATION

* I certify that the quantity(ies) requested represent no more than a 12 mo. stock of equipment, supplies or commodities.

RECEIVING INFORMATION:

I certify the above goods/services have been received in good condition.

Date Received _____
Delivery Is _____ complete; _____ incomplete

Bureau/Division Manager

DIS Manager

***Originator**

Date _____

Receiving Officer Signature

Date _____

12:54:42 Tuesday, January 14, 2014

RESECM01 ' BUREAU C-13 AND C-14 INVOICE MAINTENANCE DATE: 01/14/14
-AGCY-CD: EP PSWD: OPERID: SLB STATUS CODE: B1
TASK: TYPE: DR WARR #: WARR DATE: EFT TRACE #:
FY FUND AGCY DIV LINE SQ/TYP SUBA FY PROJ DEPTC
014 065 532 30 1200 0000 30600 LP414
CONTROL #: 0000005285 DOC: 1273 GOODS ACPT DATE: 01132014 AGE DAYS: 0
FEIN: 2049337890000001 1264/TYPE: V INVOICE RECPT DATE: 01142014
VENDOR INV#: 5662 AMT: 150 . 00 INV DATE: 01132014
REF DOC: FL-5285 CONTRACT #: BUREAU APPROVAL DATE:
VOUCHER #: DATE: ACCOUNTING APPROVAL DATE:
OB: EXPEND: DESC 1: RADIO SCRIPT
CNTY/REP DIST: - DESC 2:
DOC: DOC: DOC: DOC: DOC:
AMOUNT: AMOUNT: AMOUNT: AMOUNT: AMOUNT:
SERVICE DATES: 01132014 THRU 01132014 GAAP CD: 5300 BILLING ACCT #:

VENDOR NAME: U S MARKETING INC BEP: NONE EFT STATUS: N
ADDRESS: 100 S SAUNDERS ROAD LEGAL STATUS: 04 STATUS: A
SUITE 150 CERT CD: C
CITY: LAKE FOREST STATE: IL ZIP CODE: 60045 2502
DESC: N PROG: N DISAPRVL CDE: C-14: N A/R: N C/A: N JRNL: N
CHANGE COMPLETED
PF:2=VNDR 3=MENU 4=APRVL 5=INV MAINT 6=OLR 7=REMIT 8=PROJ 10=SUSP 11=VNDR LKUP

Receiving Officer

Date 1/15/14

Project Code LP 52/55 LP41

PESECM62

INVOICE REMITTANCE MAINTENANCE

01/14/14 12:55:45

TASK: _ AGCY-CD: EP PSWD: OPERID: SLB

FY FUND AGCY DIV SQ/TYP LINE FEIN VENDOR INVOICE # VOUCHER#
2014 065 532 30 0000 1200 2049337890000001 5662

REMITTANCE DESCRIPTION LINES

PUBLIC SERVICE ANNOUNCEMENT

EFT STATUS: N

EFT/EDI DESCRIPT:

EDI/EFT OVR: N

CONFIDENTIALITY IND: N

0017 THE ADD OF THE REMITTANCE IS SUCCESSFUL.

PF: 2=VNDR 3=MAIN MENU 4=RETURN 5=APPROP MENU 6=OLR 7=EDI ADDENDA 8=CFDA MAINT

US Marketing, Inc.

Invoice

100 S. Saunders Rd.
Suite 150
Lake Forest, IL 60045

Bill To:

IEPA
Mara McGinnis
1021 N. Grand Ave. East
Springfield, IL 62702

Date	Invoice No.	Terms
01/13/14	5662	Net 30

Item	Description	Quantity	Rate	Amount
Media Placement	Two :60 sec ads one English one Spanish Melrose Park, IL		100.00	100.00
Agency Admin	Professional Services for placement		50.00	50.00
	Please Charge LP 41			

Please Charge LP 41

Total \$150.00

Pay Online: Pay Online: <https://ipn.intuit.com/mnwtj8mk>

December 4, 2013

AGENCY OFD# FL-4816

STATE OF ILLINOIS

ORDER FOR DELIVERY

VENDOR

US Marketing, Inc.
ATTN: Jim Bilello
100 S. Saunders Road, Suite 150
Lake Forest, IL 60045
jimbilello@usmarketing.biz

Ship To
(Transportation Charges To Be Prepaid)

IEPA/BOW-Surface Water Section
ATTN: Mara McGinnis
1021 N. Grand Ave. E
Springfield, IL 62702

Bill To

IEPA Fiscal Services
P.O. Box 19276
Springfield, Illinois 62794-9276
(217) 782-3250
Submit Invoices To: EPA.FiscalServ@illinois.gov

Account Code: 065-53260-1200-00-00/30600

Agency Phone Number: Purchasing (217) 782-5088

Item No.	Description of Article	Qty	U/M	Unit Price	Total Price
	RCRA permit modification radio ad for Trex Properties, Melrose Park, IL.	1	Ea	\$100.00	\$100.00
	One minute ads (scripts attached with target air date) to air once in English, once in Spanish (priced as a package) on secular bilingual broadcast radio station serving the community of Melrose Park, IL. When billing, please ask to "charge to LP 41."	1	Prof. Svcs.	\$50.00	\$50.00
					<hr/> \$150.00
 Request Total Includes All Shipping and Handling Charges				

APPROVED BY:


Art Moore, Agency Purchasing Officer

(One minute ad to air once only on a Melrose Park-area radio station on or soon after October 31, 2013. When the ad is translated into Spanish, please substitute the Agency contact as Mr. Hernando Albarracin at 217-524-2448. Announcer--Please repeat phone # of agency contact if time allows.)

PAID RADIO ANNOUNCEMENT

The Illinois Environmental Protection Agency is considering renewing a hazardous waste management permit for Trex Properties, LLC to continue remedial work at the former Detrex Corporation facility of Melrose Park. The hazardous waste management facility is closed but Trex is required to address soil and groundwater contamination from the previous operations.

The permit application and the Agency's draft permit are now available for review at the Melrose Park Public Library. The Agency is seeking written comments from the interested public before reaching its final decision on the permit renewal. The deadline to submit written comments is December 16, 2013. For further information about reviewing documents and submitting comments, please call Ms. Mara McGinnis at 217-524-3288.

Spanish Translation (edits by Hernando Albarracin):

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SB

FY: 2013

☐ Call before attempting delivery.
☒ Request total includes all shipping and handling charges.
☐ Vendor to prepay delivery charges and add to invoice

12-6-13
KURT NEWELL
Bureau/Division Manager

* I certify that the quantity(ies) requested represent no more than a 12 mo. stock of equipment, supplies or commodities.

Date _____

I certify the above goods/services have been received in good condition.
Date Received _____
Delivery is ☒ complete ☐ incomplete

Date _____



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Richard Durbin,
United States Senator
230 S. Dearborn Street, Ste. 3892
Chicago, IL 60604

Dear Senator Durbin:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

A public information repository has been established at the Melrose Park Public Library so that anyone interested can review the permit application and the Illinois Environmental Protection Agency's draft permit. Illinois EPA is accepting public comments on the draft permit until December 16, 2013 for consideration prior to preparing a final RCRA permit decision.

If you have any questions, please call me at 217/782-3397.

Sincerely,

A handwritten signature in dark ink that reads "John Cross".

John Cross
Office of Legislative Liaison

Enclosure



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Mark Kirk
United States Senator
230 S. Dearborn Street, Ste. 3900
Chicago, IL 60604

Dear Senator Kirk:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

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John Cross
Office of Legislative Liaison

Enclosure



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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Luis V. Gutierrez
U.S. Congress, IL Dist. 4
5531 W. Cermak Rd.
Cicero, IL 60804

Dear Congressman Gutierrez:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Mike Quigley
U.S. Congress, IL Dist. 5
1057 W. Belmont Ave.
Chicago, IL 60657

Dear Congressman Quigley:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

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If you have any questions, please call me at 217/782-3397.

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John Cross
Office of Legislative Liaison

Enclosure



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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Don Harmon
IL State Senator, Dist. 39
6933 W North Ave.
Oak Park, IL 60302

Dear Senator Harmon:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

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If you have any questions, please call me at 217/782-3397.

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John Cross
Office of Legislative Liaison

Enclosure



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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Kathleen Willis
Illinois State Representative, Dist. 77
112 N. Wolf Rd.
Northlake, IL 60164

Dear Representative Willis:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

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John Cross
Office of Legislative Liaison

Enclosure



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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-3397

October 30, 2013

The Honorable Camille Lilly
Illinois State Representative, Dist. 78
5755 W. Division
Chicago, IL 60651

Dear Representative Lilly:

The enclosed material refers to the renewal of a Resource Conservation and Recovery Act (RCRA) permit applied for by Trex Properties, LLC for the now closed, former Detrex Corporation facility of Melrose Park, Illinois. This renewal permit will require the current owner to address solvent releases from the former industrial facility.

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If you have any questions, please call me at 217/782-3397.

Sincerely,

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John Cross
Office of Legislative Liaison

Enclosure



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR LISA BONNETT, DIRECTOR

217-524-3288

October 30, 2013

Mr. Ron Serpico, Mayor
Melrose Park Village Hall
1000 N. 25th Ave.
Melrose Park, IL 60160

Dear Mr. Serpico:

The enclosed public notice concerns the former Detrex Corporation facility on LeMoyne Ave. in Melrose Park. The current owner, Trex Properties, has assumed responsibility for the environmental problems that have yet to be addressed at the former facility. Trex has submitted a renewal application for the permit and the Illinois EPA has prepared a draft renewal permit, both of which are now available for public review at the Melrose Park Public Library.

Unfortunately, these documents are available only in English. Because Melrose Park has a large Hispanic population, much of which speaks English poorly according to the 2010 Census, the Illinois EPA has assigned a bilingual contact to assist with fielding any questions concerning this draft permit from the non-English speaking portion of the community. That person is Hernando Albarracin; he can be reached at 217-524-2448. I have taken the liberty of providing this information to the Hispanic Liaison on your staff, Mr. San Anguiano, as well.

If English-speaking members of the community have any questions concerning the draft permit, they may contact me directly (217-524-3288).

Sincerely,

A handwritten signature in black ink, appearing to read "Mara McGinnis".

Mara McGinnis
Office of Community Relations

Enclosure



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217-524-3288

October 30, 2013

Mr. San Anguiano, Hispanic Liaison
Melrose Park Village Hall
1000 N. 25th Ave.
Melrose Park, IL 60160

Dear Mr. Anguiano:

The enclosed public notice concerns the former Detrex Corporation facility on LeMoyne Ave. in Melrose Park. The current owner, Trex Properties, has assumed responsibility for the environmental problems that have yet to be addressed at the former facility. Trex has submitted a renewal application for the permit and the Illinois EPA has prepared a draft renewal permit; both of which are now available for public review at the Melrose Park Public Library.

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If English-speaking members of the community have any questions concerning the draft permit, they may contact me directly (217-524-3288).

Sincerely,

A handwritten signature in black ink that reads "Mara McGinnis". The signature is fluid and cursive, with the first name "Mara" and last name "McGinnis" clearly distinguishable.

Mara McGinnis
Office of Community Relations

Enclosure



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3288

October 25, 2013

Ms. Leanne O'Brien
Melrose Park Public Library
801 N. Broadway
Melrose Park, IL 60160

Dear Ms. O'Brien:

Enclosed please find the binders of information that we discussed by phone on October 22. The information is relevant to the Resource Conservation and Recovery Act (RCRA) permit that Trex Properties, LLC is required to maintain during continued corrective action at the former Detrex Corporation hazardous waste management facility in Melrose Park. It is very important that everyone in the area have the opportunity to review the application materials submitted by Trex and the draft permit renewal proposed by the Illinois Environmental Protection Agency.

The best place for citizens to begin review of the permit information is the thin black binder entitled "Draft RCRA Permit Renewal and Related Materials for Trex Properties, LLC (formerly Detrex Corporation), Melrose Park." The other binder contains all the background information referenced in the draft permit renewal. My name and phone number are listed in the thin black binder in case anyone has questions regarding this process. Written comments should be sent to me by December 16, 2013.

These binders should not be allowed to circulate since the interested public might then be prevented from reviewing the materials during the 45-day comment period. At the end of the permit process (approximately 6-9 months) you may recycle all of the repository information. I would recommend, however, that you keep it for your community's archives. Once issued, the permit's lifetime is ten years but it can be modified at any time -- most frequently at the request of the permittee. I will recommend that the permittee contact you to request the continued use of your library facilities as the information repository for any future significant modifications.

I would appreciate it if you would complete the enclosed verification form and return it to me in the enclosed postage-paid envelope. Thanks again for your assistance in this effort.

Sincerely,

A handwritten signature in cursive script, reading "Mara McGinnis". The signature is fluid and elegant, with the first name "Mara" and last name "McGinnis" clearly distinguishable.

Mara McGinnis
Office of Community Relations

Enclosures

VERIFICATION OF REPOSITORY RECEIPT

Please fill out this form and return it to Ms. Mara McGinnis in the enclosed postage-paid envelope.

Repository Location: Melrose Park Public Library
801 N. Broadway
Melrose Park, IL 60160

Facility: Trex Properties, LLC (former Detrex Corporation facility)
2537 LeMoyne Ave.
Melrose Park, IL 60160

Date binders arrived: _____

Signature of documents recipient: _____

Trek, Melrose Park - 2013 Renewal 10/30 next out

News Desk
Melrose Park Herald
1232 Central Ave.
Melmette, IL 60091

News Desk
Chicago Tribune
435 N. Michigan
Chicago, IL 60611

News Director
WBBM, Channel 2
630 N. McClurg St.
Chicago, IL 60611

News Director
WGN, Channel 9
2901 W. Bradley Pl.
Chicago, IL 60618

News Director
WMAQ, Channel 5
Merchandise Mart
Chicago, IL 60654

News Director
WLS, Channel 7
190 N. State Street
Chicago, IL 60601

News Director
WTTW, Channel 11
5400 N. St. Louis Ave.
Chicago, IL 60625

News Director
WFLD, Channel 32
300 N. State
Chicago, IL 60610

News Director
WBBM, AM-FM
630 N. McClurg St.
Chicago, IL 60611

News Director
WBEZ / FM
1819 W. Pershing Rd.
Chicago, IL 60609

News Director
WFMT / FM
303 E. Wacker Dr.
Chicago, IL 60618

News Director
WGN / AM
435 N. Michigan
Chicago, IL 60611

The Honorable Richard Durbin,
United States Senator
230 S. Dearborn Street, Ste. 3892
Chicago, IL 60604

The Honorable Mark Kirk
United States Senator
230 S. Dearborn Street, Ste. 3900
Chicago, IL 60604

The Honorable Kathleen Willis
IL State Representative, Dist. 77
112 N. Wolf Rd.
Northlake, IL 60164

The Honorable Don Harmon
IL State Senator, Dist. 39
6933 W North Ave.
Oak Park, IL 60302

The Honorable Mike Quigley
U.S. Congress, IL Dist. 5
1057 W. Belmont Ave.
Chicago, IL 60657

The Honorable Camille Lilly
Illinois State Representative, Dist. 78
5755 W. Division
Chicago, IL 60651

Regulatory Branch, Chicago District
U.S. Army Corps of Engineers
231 S. LaSalle Street, 16th Floor
Chicago, IL 60604

The Honorable Luis V. Gutierrez
U.S. Congress, IL Dist. 4
5531 W. Cermak Rd.
Cicero, IL 60804

Gary Victorine, Chief--RCRA Branch
Land and Chemicals Division, 8th Floor
U.S. EPA - Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Mary Setnicar, RCRA/TSCA Prgms. Sect. Chief
Land and Chemicals Division, 8th Floor
U.S. EPA - Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Lara Lasky, EJ Program Coordinator
US EPA Region 5
77 W. Jackson Blvd
Chicago, IL 60604

Alan Walts, Assoc. Regional Counsel
Office of Regional Counsel
US EPA Region 5
77 W. Jackson Blvd
Chicago, IL 60604-3590

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Oak Forest, IL 60452

IDNR, Div. of Natural
Resource Review & Coordination
One Natural Resources Way
Springfield, IL 62702-1271

Illinois. Historic Preservation Agency
Preservation Services / Archeology Sect.
1 Old State Capital Plaza
Springfield, IL 62701-1512

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One Natural Resources Way
Springfield, IL 62702-1271

IL Dept. of Agriculture
Div. of Natural Resources
State Fairgrounds. P. O. Box 19281
Springfield, IL 62794

IDNR
Office of Water Resource Mgt.
One Natural Resources Way
Springfield, IL 62702-1271

IDOT
Bureau of Environmental Programs
PO Box 19281
Springfield, IL 62794

IL Dept. of Public Health
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Bellwood, IL 60104

Illinois Dept. of Commerce and
Economic Opportunity
620 East Adams St.
Springfield, IL 62701

Illinois State Chamber of Commerce
215 E. Adams St.
Springfield, IL 62701

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IL State Geological Survey
615 E. Peabody
Champaign, IL 61820

Waste Management Research &
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Champaign, IL 61820

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IL State Natural History Survey
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Melrose Park, IL 60160

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Illinois State Water Survey
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Champaign, IL 61820

Mr. Jack Hickey
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Chicago, IL 60602

Mayor Ron Serpico
Melrose Park Village Hall
1000 N. 25th Avenue
Melrose Park, Illinois 60160

Mary Ann Paolantonio, Village Clerk
Melrose Park Village Hall
1000 N. 25th Avenue
Melrose Park, Illinois 60160

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Melrose Park Village Hall
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Southfield, MI 48075

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St. Louis, MO 63131

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Natural Resources Defense Council
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Chicago, IL 60606

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Chicago, IL 60604-4301

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Operations Mgr.
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Harvey, IL 60426

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Chicago, IL 60640

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Johnson, Depp & Quisenberry
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Midwest Center for Environmental
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Milwaukee, WI 53202

Operations Mgr.
Safety Kleen Dolton Recycle Center
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Dolton IL 60419

Tita LaGrimas, Dir., Reg. Affairs
Pollution Control Industries
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East Chicago, IN 46312

Sierra Club Prairie Group
PO Box 131
Urbana, IL 60803

Angela Tin, Dir., Env'l Programs
American Lung Assoc. of IL
3000 Kelly Lane
Springfield, IL 62711

11:10:23 Wednesday, December 11, 2013

P1 SECM01 • BUREAU C-13 AND C-14 INVOICE MAINTENANCE DATE: 12/11/13
AGCY-CD: EP PSWD: OPERID: SLB STATUS CODE: B1
TASK: TYPE: DR WARR #: WARR DATE: EFT TRACE #:
FY FUND AGCY DIV LINE SQ/TYP SUBA FY PROJ DEPTC
2014 065 532 30 1200 0000 30600 LP414
CONTROL #: 0000005111 DOC: 1273 GOODS ACPT DATE: 12052013 AGE DAYS: 2
FEIN: 3706281146270301 1264/TYPE: V INVOICE RECPT DATE: 12092013
VENDOR INV#: 11132 AMT: 499 . 44 INV DATE: 11292013
REF DOC: CONTRACT #: MUL11301 BUREAU APPROVAL DATE:
VOUCHER #: DATE: ACCOUNTING APPROVAL DATE:
OB: MUL11301 EXPEND: DESC 1:
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AMOUNT: AMOUNT: AMOUNT: AMOUNT: AMOUNT:

SERVICE DATES: 11212013 THRU 12052013 GAAP CD: 5300 BILLING ACCT #:

VENDOR NAME: ILLINOIS PRESS ASSOCIATION INC BEP: NONE EFT STATUS: Y
ADDRESS: 900 COMMUNITY DRIVE LEGAL STATUS: 04 STATUS: A
CERT CD: C

CITY: SPRINGFIELD STATE: IL ZIP CODE: 62703 5180

DESC: PROG: DISAPRVL CDE: C-14: A/R: N C/A: N JRNL:

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PF:2=VNDR 3=MENU 4=APRVL 5=INV MAINT 6=OLR 7=REMIT 8=PROJ 10=SUSP 11=VNDR LKUP

Project Code LP 52/55
Date
Receiving Officer

Sharon E. Ginnis
Receiving Officer

Date 1/2/14

Project Code LP 52/55 LP 41

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11:10:59 Wednesday, December 11, 2013

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INVOICE REMITTANCE MAINTENANCE

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TASK: _ AGCY-CD: EP PSWD:

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REMITTANCE DESCRIPTION LINES

PUBLIC NOTICE ADVERTISEMENT PLACED IN THE MAYWOOD WEST
SUBURBAN JOURNAL

EFT STATUS: Y

EDI/EFT OVR: N

EFT/EDI DESCRIPT: 11132 INVOICE

CONFIDENTIALITY IND: N

0017 THE ADD OF THE REMITTANCE IS SUCCESSFUL.

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065-53230-1200-0000
30600 / LP414
11/21/13 - 12/5/13

Account: **BUREAU OF LAND - November Placements**

<u>Newspaper</u>	<u>Department</u>	<u>Run Date</u>	<u>Ad Size</u>	<u>Total Due</u>
Maywood West Suburban Journal	Community Relations	11/21, 11/28, 12/05/13	2 x 4	\$499.44

TOTAL DUE \$499.44

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PUBLIC NOTICE OF DRAFT HAZARDOUS WASTE PERMIT RENEWAL

The Illinois Environmental Protection Agency (IEPA) hereby gives notice of intent to renew a Resource Conservation and Recovery Act (RCRA) permit held by Trex Properties, LLC for the former Detrex Corporation facility property at 2537 LeMoyné Ave., Melrose Park, IL 60160. The current owner, Trex, has assumed responsibility for performing corrective action at the closed hazardous waste management facility to address solvent releases at the site.

The interested public is invited to review a copy of the permit application, draft permit decision and related fact sheet at the **Melrose Park Public Library, 801 Broadway.**

Written comment on the draft permit must be sent to the contact listed below postmarked by midnight **December 16, 2013**. Timely comments will become part of the Administrative Record (AR) and will be evaluated in making the final permit decision. Any public hearing request must be made in writing, state opposition to the draft permit and the nature of issue(s) to be raised at the hearing. Hearing requests must be postmarked by the comment deadline. Commenters will be notified of the IEPA permit decision and appeal process.

The AR (permit application, draft permit decision and all data submitted to the IEPA) is available for inspection by appointment only Mon-Fri, 9:00 a.m.-5:00 p.m. at IEPA's main office:

Mara McGinnis (#5) Phone: 217/524-3288
Illinois EPA TDD: 217-
782-9143
1021 North Grand Avenue East, P. O. Box 19276
Springfield, Illinois 62794-9276

For further RCRA information, go to:
<http://www.epa.gov/epawaste/wycd/manag-hw/index.htm>

Published in WSJ 11/21/13, 11/28/13, 12/5/13

HOUSE PASSES MARRIAGE FAIRNESS ACT >

session day on April 13.

Harris was visibly emotional when he decided not to bring SB10 to the Illinois House floor and faced great criticism for the decision. Yet, he stated at the time, that he wanted to give his contemporaries enough time to go home, speak with their respective constituents and raise even more support to ensure the success of SB10.

The landmark legislation required 60 votes in the House in order to carry the majority. It received 61 votes. Of the Illinois House Black Caucus, 14 members out of 20 voted in favor of the Religious Freedom and Marriage Fairness Act.

The Religious Freedom and Marriage Fairness Act will amend the Code of Civil Procedure and provide these provisions: All laws of this State applicable to marriage apply equally to marriages of same-sex and different-sex couples and their children; parties to a marriage and their children, regardless of whether the marriage is of a same-sex or different-sex couple, have the same benefits, protections, and responsibilities under law.

"Today is a critical moment in history for Illinois and for the entire LGBT movement," said Chicago Mayor Rahm Emanuel. "Finally, gays and lesbians across our state are guaranteed the fundamental right to marry, and countless couples with children will be acknowledged for what they are under the law – families just like everyone else. I commend State

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Springfield, Illinois 62794-9276

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TDD: 217-

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782-9143
1021 North Grand Avenue East, P. O. Box 19276
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D209 RECOGNITION AWARDS >

Mandarin and Arabic language classes at PMSA.

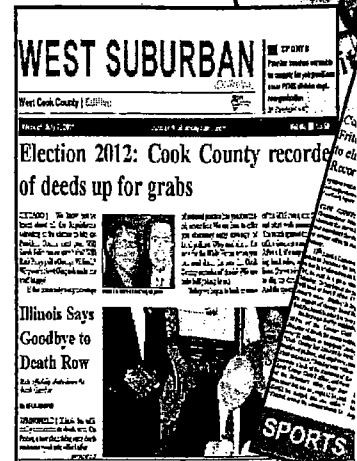
PMSA staff members also are studying the possibility of adding an International Baccalaureate program at PMSA. Karvelas said that the program used at other schools has produced high achievers who have gone on to some of the best colleges and universities around the world, with a diploma earned in the program good for two

years of magnet said. "It and it us "It's no The member starting t Proviso in bri Baccala would be presiden

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FILINGS OPEN FOR ELECTED OFFICES

doing.

Among the nine challenges for the 1st District seat is City Boykin, former aid to Mayor Danny Davis.

of Cook County Board member Toni Preckwinkle.



Al Sanchez, 30, is a law school graduate from the University of Illinois at Chicago. He is currently a law clerk at a law firm in Chicago. He is also a member of the Cook County Board of Supervisors. He is running for the 1st District seat in the upcoming election.

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CC 10001 0111
B-113R2
TREX PROPERTIES LLC

ELT TREX PROPERTIES LLC
1650 DES PERES RD., STE 303
SAINT LOUIS, MO 63131
314-835-1515 P
314-835-1616 F

November 5, 2013

Mr. Steven Nightingale
ILEPA, WMD
1021 N. Grand Ave. East
Mail Code 33
PO Box 19276
Springfield, IL 62794-9276
VIA: USPS

RE: Log Number B-113R
Draft Corrective Action Permit
Trex Properties, LLC
2537 Lemoyne Ave.
Melrose Park, IL 60160
USEPA ID#: ILD 074 424 938

Dear Mr. Nightingale:

Trex has received and reviewed the draft copy of the Corrective Action Permit (CAP) dated October 25, 2013 and would like to offer the following comments regarding the CAP;

1. **Fact Sheet:** the Attachment B diagram indicates there are three property owners to the east of our site. To the best of our knowledge all three buildings, 2526 and 2515 LeMoyne Ave. and 1800 North Ave. are owned by LaMantia Plastics (now SGRP Group).
2. **Section I.C:** There are three items in that appear to require modification.
First, it denotes that Trex will be using Emulsified Zero Valent Iron (EZVI) for treatment of contaminated soils at the property. Presently we would not like to commit to that as the only treatment method; we are also presently considering the use of an oxidant as another means of reducing contamination at the site.
Second, while there are nine monitoring wells there are only seven that are currently required to be monitored as part of the Groundwater Monitoring Zone (GMZ).
Finally, the application denotes the adjacent property owners must agree to the GMZ before it can be formally established. Trex is requesting clarification on what is meant by formal establishment.
3. **Section III.C.2:** contamination on and off site is the result of spills from the loading and unloading of product and not waste material. In addition there are only two monitoring wells (MWs) on site – MW1 and MW2. All other wells installed in 1997 (MW 3 through 6) are off site.
4. **Section III.D.4 & 5:** The permit requires a revised Corrective Measures Plan (CMP) to be submitted to the IEPA within 90 days after completion of the investigation workplan required to be submitted under section III.D.3 (by December 15, 2013). However it also appears that as part of the workplan we must submit a CMP and specify and describe remedial objectives

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PERMIT SECTION

for off-site properties. Trex would like to remove the requirement for including the CMP and remedial objectives in the workplan required under III.D.3. We feel this would be best addressed after collection of the additional data.

5. **Section IV:** while we understand that this section includes standard permit conditions, there are a number of requirements that are not applicable to a site that is undergoing corrective actions. Without a special condition to remove these requirements we can still be bound to them (for example maintaining documents on site). Trex is requesting a special condition be added to the permit denoting what standard conditions are not applicable to this CAP.

Thank you in advance for your help and consideration in addressing these issues. If you have any questions please feel free to give me a call at 248.358.5800.131.

Best regards,



David Craig
Senior Project Manager

CC: File
M. Robinson - ELT
Takako Halteman (electronic copy - Takako.Halteman@illinois.gov)



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/524-3300

October 9, 2003

CERTIFIED MAIL

7002 3150 0000 1219 9091

Detrex Corporation
Attn: Robert Currie
P.O. Box 5111
Southfield, MI 48086-5111

Re: 0311860003 - Cook County
Detrex Corporation
ILD074424938
Part B Log #113R
RCRA Part B Administrative Record

Dear Mr. Currie:

Enclosed is a renewal RCRA (Resource Conservation and Recovery Act) Hazardous Waste Management Part B permit, fact sheet and response to comments received during the public comment period. The permit is based on the administrative record contained in the Illinois EPA's files. The contents of the administrative record are described in Title 35 Illinois Administrative Code (Ill. Adm. Code) Section 705.144.

The permit is divided into two parts: A RCRA permit issued by Illinois EPA and a Hazardous Waste Management Permit issued by USEPA regarding 40 CFR 269, Subpart CC, air emission standards for tanks, surface impoundments and containers. The USEPA permit is being mailed separately. Read both the permits carefully, failure to meet any portion of either permits could result in civil and/or criminal penalties.

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

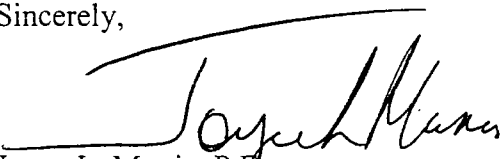
Within 35 days after the notification of a final permit decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not

Page 2

to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

If you have any questions regarding this permit please contact Mary Riegle of my staff at 217/524-3329. Questions on the USEPA Permit may be directed to Jim Blough, USEPA 312/886-2967.

Sincerely,



Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

JLM:MER:bjh\982691s.doc

Attachments: Attachment 1 – Changes to permit
Attachment 2 – Response to comments
RCRA Part B

cc: USEPA, Jim Blough

Attachment 1
Changes to Permit

In response to the comments received from the applicant during the public comment period, the following changes were made to the permit:

1. The method of container acceptance in Condition I.I was changed from drummed to DOT containerized.
2. Condition II.A was modified to allow the storage of 579 55-gallon empty drums, containers of product and/or non-hazardous waste in the secondary containment area (stacked 3-high).
3. Conditions II.B.20 through II.B.23 were added to address the stacking of containers 3-high.
4. In Condition II.B.2, "table C-1" was changed to "Attachment C-1" and the maximum amount of hazardous waste to be stored was changed to 13,200 gallons.
5. Condition II.B.4 was modified to allow Detrex to obtain a representative sample and conduct the preliminary assessment of new wastes rather than the generator doing the analysis.
6. The requirement in Condition II.B.6 to analyze all waste in containers for flammability was changed to require at least 10% of all containers be analyzed.
7. The requirement in Condition II.B.6 that the specific gravity of incoming waste be consistent with preliminary assessment was removed.
8. The reference to Table C-1 of the application was removed in Condition II.B.7.
9. The wording was changed in Condition II.B.11 to read "Coliwasa sampler or similar device."
10. The wording in Condition II.B.12 was changed to allow the storage of 579 55-gallon containers of product, non-hazardous waste and empty containers in the secondary containment system.
11. Condition II.B.13 was modified to read "Calibration procedures for monitoring equipment shall be conducted in accordance with the latest addition of SW-846."
12. Condition II.C.3 was modified to require that containers be labeled or placarded.

13. All references to sump pumps or respirators have been removed from Attachment C and Table II, Page C-3.
14. Condition II.B.9-II.B.13 were modified to allow waste stream categories and corresponding testing time frames.

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Attachment 2
RESPONSE TO COMMENTS
Detrex Corporation
0311860003
ILD074424938
RCRA Log No. 113R

Comment 1. Please change the method of container acceptance from drummed to DOT containerized, as this is more consistent with our ability to accept bulk containers.

Our Response.

This change to Condition I.I will be made.

Comment 2. Detrex Corporation would like the language here to be more general to accommodate our ability to store additional material as product, non-hazardous, and special wastes. We would like to change the second to the last sentence to read: **a maximum of 45,000 gallons of product, non-hazardous waste, special waste, and hazardous waste may be stored in the secondary containment area at the facility, of which no more than 13,200 gallons will be hazardous waste.**

To address the issue of additional capacity for storage, enclosed you will find a revised copy of Attachment D-6.

Our Response.

This change to condition II.A will be made. Additional conditions concerning the stacking of containers 3-high will be added to the permit.

Comment 3. Change table C-1 to Attachment C-1 and denote that the maximum amount of hazardous waste is 13,200 gallons.

Our Response.

This change to Condition II.B.2 will be made.

Comment 4. Please change the method of container acceptance from drummed to DOT containerized, as this is more consistent with our ability to accept bulk containers. In addition, the first sentence is unclear as to what it is referring to. If it refers to the requirement of obtaining a representative sample of the waste stream along with the profile sheet, then I would suggest the following: **Prior to the first shipment of hazardous waste to the facility, Detrex will obtain a representative sample of the waste along with the profile sheet for preliminary assessment.**

Add a comma following pH.

Our Response.

These changes to Condition II.B.4 will be made.

Comment 5. Change the second sentence to read: **In addition, at least 10% of the containers listed on each line item of the manifest shall be screened according to the flammability test method ASTM D4982-89.** This verbiage is more in line with our application and will prevent the possibility of camouflaging a container of flammable liquids due to its being composited.

In the last sentence, please remove the requirement for specific gravity (SG) to be consistent with the profile for acceptance. The only purpose for SG is to help Detrex determine the amount of solvent, if any; which can be recovered from the container.

Our Response.

These changes to Condition II.B.6 will be made.

Comment 6. As previously stated, there is no table C-1 in the current application. As noted during our conversation of June 5th, we would like to remove the requirement for performing underlying constituent analysis on incoming streams of liquid hazardous wastes. All chlorinated wastes received at Detrex are either, sent out for recovery (typically to another Detrex facility), or are sent for disposal via incineration or for fuel blending. NO liquid hazardous waste stream of chlorinated solvents is disposed of via landfill. Therefore, nothing is gained by requiring generators who send their liquid chlorinated waste to Detrex to analyze for underlying constituents.

I will be sending you under separate cover the modified Waste Analysis Plan to address this issue in the permit application sometime in the next two weeks.

Our Response.

In accordance with your modified Waste Analysis Plan, this section has been changed. Detrex will establish categories of waste streams. Once a category has 10 waste streams analysis is will be considered "established". 10% of the waste streams in each established category must be tested every other year in accordance with Condition II.B.13 of the permit. 100% of the waste streams that are in categories that are not established must be tested in accordance with condition II.B.13. 100% of the generators waste streams who elect not to be placed into a category must be tested in accordance with condition II.B.13.

Comment 7. Please change this (II.B.11) to read: Coliwasa sampler or similar device.

Our Response.

This change to Condition II.B.11 will be made.

Comment 8. Please remove the first sentence (from II.B.12) as it is already covered under II.A.

Our Response.

The maximum permitted storage of empty containers and product is repeated in both Conditions II.B.12 and II.A. Condition II.B.12 goes on to elaborate specific conditions for the storage of these containers. The repetition helps to clarify what is permitted and will not be removed.

Comment 9. Detrex would like this (II.B.13) removed from the license, as it does not apply to any of the test methods under the Waste Analysis Plan for day-to-day operations. This paragraph may be better suited under a closure requirement.

Our Response.

The Agency will modify Condition II.B.13 to read "Calibration procedures for monitoring equipment shall be conducted in accordance with the latest addition of SW-846."

Comment 10. Detrex is requesting that both paragraphs (II.B.15 & II.B.19) be removed from the operating license. Requirements stated here are already addressed in II.A.

Our Response.

Again, the repetition only helps to clarify and will not be removed.

Comment 11. Detrex is requesting that the last sentence (of II.C.3) be modified to indicate labeling or placarding (non-bulk VS bulk).

Our Response.

This change to Condition II.C.3 will be made.

Comment 12. As per our conversation, documentation will be kept as part of the facility records to denote when the local response agency(ies) did not attend or did not respond to our request.

Our Response.

No change requested.

Comment 13. Detrex is asking the removal of all references to sump pumps or respirators removed as these forms of emergency equipment. They were not included in the permit application.

Our Response.

The requested changes to Attachment C and Table II, Page C-3 will be made.

Comment 14. Attachment D-6 has been modified to address the ability to store product, non-hazardous wastes, and special wastes at the site in quantities up to 27, 500 gallons.

Our Response.

No change requested. The new attachment will be incorporated into the application.

Comment 15. At this time I would also like to request that upon final approval of the permit, that Detrex be provided with an electronic copy of the permit as issued by the state of Illinois. We feel that having the electronic version will allow us to generate a training manual using excerpts from the actual license and where necessary from the application.

Our Response.

At this time the Illinois EPA is not issuing electronic copies of RCRA Part B Permits.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

Detrex Corporation
Attn: Mr. Robert Currie
P.O. Box 5111
Southfield, MI 48086-5111

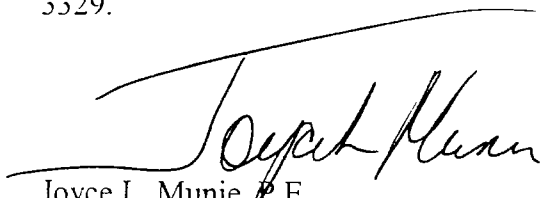
Illinois EPA #0311860003 -- Cook County
USEPA ILD074424938
Detrex Corporation, Melrose Park Facility
RCRA Permit No. 113R
RCRA -- Part B Administrative Record

Issue Date: October 9, 2003
Effective Date: November 13, 2003
Expiration Date: October 9, 2013

A RCRA Part B renewal Permit is hereby proposed pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) Parts 702, 703, 705, and 720 through 729 to the Detrex Corporation Melrose Park facility to operate a waste management facility involved in the storage of hazardous waste. Detrex Corporation is located at 2537 LeMoyne Avenue, Melrose Park, Illinois.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which is issued. This Permit contains 90 pages including Attachments A through F.

If you have any questions regarding this Part B Permit, please contact Mary Riegler at 217/524-3329.


Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

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HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

DETREX CORPORATION

Melrose Park, Illinois

LPC No. 0311860003 -- Cook County

ILD074424938

Permit Log No. 113R

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SECTION I GENERAL PROVISIONS

I. General Description

Detrex is located in Melrose Park, Illinois. The facility is designed to store and transfer hazardous and non-hazardous spent solvent wastes. These wastes may be either solids, liquids or sludges, and received in containers. The waste are halogenated organic hazardous wastes under 35 Ill. Adm. Code 721, classified as F001 or F002 and the corresponding U codes for these materials. The wastes may also be fully classified as D-series wastes with respect to Toxicity Characteristic Leaching Procedure parameters. This is a draft renewal RCRA Part B Permit for an existing facility. Detrex also accepts and transfers non-hazardous waste under Permit No. 1980-044-OP. Products are also stored on-site.

Spent solvent wastes are collected from industries such as: the metal working industries that clean oil and grease from machined and stamped parts, rubber molding operations where defective parts are removed from metal inserts, the electronic industry where circuit boards and other components are cleaned and defluxed, industries that spray paint on an assembly line basis where hangers and conveyor components are cleaned with solvents on-line, and other similar type industries.

The hazardous waste operation at the facility in Melrose Park, Illinois consists of a container storage area used for the storage of DOT containerized solvent wastes prior to the transfer of these wastes to an off-site Detrex solvent reclamation (recycling) facility, or to an off-site permitted treatment/disposal facility.

II. Specific Hazardous Waste Management Units

The facility has one hazardous waste container storage area. The maximum volume of hazardous waste to be stored in this area shall be 13,200 gallons, corresponding to a maximum of 240 55-gallons drums.

III. Approved Application

The facility received its initial permit on September 30, 1992. This Permit expired on November 4, 2002. An application for renewal was received on May 1, 2002. This draft is based on the application for renewal.

SECTION II CONTAINERS

A. SUMMARY

Containers of hazardous waste shall be stored in the hazardous waste storage area. The hazardous waste storage area is located indoors, in the northern half of the site. The portion of the building that makes up the hazardous waste storage area is defined by its diked concrete base. The concrete is coated with a chemical resistant sealant. The hazardous waste storage area shall have a containment capacity of at least 11,269 gallons. This containment capacity is adequate to contain at least 10 percent of the volume of the hazardous waste, non-hazardous waste and product containers to be stored within the secondary containment system. The maximum volume of hazardous waste to be stored in the hazardous waste storage area shall be 13,200 gallons, corresponding to a maximum of 240 55-gallon drums. A maximum of 579 55-gallon empty containers, containers of product and/or non-hazardous waste (stacked 3 high) may also be stored within the secondary containment area. The only waste which may be stored in the hazardous waste storage area are hazardous wastes as identified in Table C-1 of the approved permit application.

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall only be conducted in the approved storage area shown as the hazardous waste container storage area on Attachment D-1 of the approved permit application.
2. The Permittee may only store the hazardous wastes identified in Attachment C-1 of the approved permit application in the container storage area. A maximum of 13,200 gallons of hazardous waste may be stored in the container storage area. The hazardous waste codes for those wastes are listed in Attachment A to this permit.
3. The Permittee is prohibited from storing hazardous waste in the secondary containment area that is not identified in Condition B. 2. above.
4. Prior to the first shipment of hazardous waste from a new customer, to the facility, the Permittee shall obtain a representative sample of the waste stream and conduct preliminary assessment of the waste. This preliminary assessment shall include analysis of a waste sample for specific gravity, pH, ignitability and a visual inspection of a full depth sample, using a coliwasa, to determine color and phases. A representative sample obtained from each drum of waste shall be analyzed for specific gravity, pH, ignitability, flammability and visual inspection in accordance with the

approved waste analysis plan. The results of all laboratory analyses shall be recorded in the facility operating record. For each analysis, the operating record shall also indicate who obtained the sample, the date of the sampling, and the sampling procedures used.

5. The Permittee shall only accept wastes with a specific gravity greater than or equal to 0.80 and less than or equal to 1.68.
6. Prior to storing containers of waste in the hazardous waste container storage area, all containers shall be visually inspected and analyzed for specific gravity and the results compared to the one recorded during the preliminary assessment. In addition, at least 10% of all containers listed on a line item of a manifest shall be screened according to the flammability test method ASTM Method D4982-89. If the composite sample is flammable or even slightly flammable, all the drums within that composite shall be analyzed for flammability. Any drum that is flammable or even slightly flammable shall be analyzed for ignitability (ASTM Method D3278-89) and the results compared to the one recorded during the preliminary assessment. If a discrepancy is found, the waste shall not be accepted at the facility prior to reanalysis. If the ignitability and visual inspection are consistent with previous analysis, the containers may be stored at the facility.
7. Analysis for organics shall include all of the hazardous constituents for the volatile organics identified in Attachment A to this permit.
8. Samples which will be tested for volatile organics shall not be composited because of the volatilization which may result from any compositing method.
9. The permittee shall categorize all waste streams based on the process and types of metals cleaned as described in the approved permit application. Once more than 10 waste streams are included in a category, the permittee may reduce periodic testing/retesting as defined in Condition II.B.13. The permittee shall maintain a list of waste streams that have not been tested in the last 5 years. Waste streams from that pool (list) are to be randomly tested at a rate of 10% for each Categorical Waste Generator Listing category every other year. The permittee shall maintain a current Categorical Waste Generator Listing by adding or removing waste streams from the list as part of a monthly update.
10. As part of the waste acceptance procedure, the permittee shall review each profile sheet to determine if the generator can fit into one of the statistically established categories using the procedures defined in the approved permit application. If the generator opts to use the categorical listing rather than running a new analysis, the permittee shall

manage the waste in accordance with the LDR classification and waste characteristics associated with that category. The permittee shall update the profile and the LDR to include the LDR classification and waste characteristics associated with that category.

11. If the generator does not fit into one of the existing statistically established categories, or the generator prefers not to use the categorical listing, the permittee shall not accept the waste without documenting compliance with the requirements of 35 Ill. Adm. Code 728.107 using one of the following methods 1) performing analysis 2) obtaining analysis from the generator that identifies concentrations of underlying constituents, or 3) a generator certification based on adequate generator knowledge of the underlying constituents. The certification must include the method used to make this determination.
12. For those categories as identified using procedures in the approved waste analysis plan that are not yet statistically established, 100% of the waste streams shall be tested as required by condition II.B.13
13. Every five (5) years a sample from each waste stream from each customer shall be sent off-site to the laboratory for analysis of specific gravity, organics, ignitability, and total metals, unless the process generating the waste changes prior to that time. If the process generating the waste changes, the waste shall not be accepted at the facility prior to reanalysis.
 - a. For existing customers on the effective date of this permit, the first such analysis shall be conducted as follows:
 1. If the generator or the Permittee has conducted such an analysis within the last two (2) years prior to the effective date of this permit, then the next analysis shall be conducted not later than five (5) years from the date of such analysis.
 2. If the generator or the Permittee has not conducted such an analysis as set forth above, and the Permittee is storing the waste stream from the generator on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the effective date of this permit.
 3. If the generator or the Permittee has not conducted such an analysis as set forth in Condition I.B.9.a.1 above and the Permittee is not storing the waste stream from the customer on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the date

of receipt of the first delivery of the waste stream from the generator following the effective date of this permit.

- b. For new customers obtained after the effective date of this permit, such analysis shall be conducted within five (5) years after the preliminary assessment or within five (5) years of the analysis conducted by the generator, whichever is earlier.
- 14. Analysis for ignitability shall be conducted in accordance with ASTM D-93 or ASTM D-3228 (35 IAC Section 721.121 (a)(1)). Analysis for flammability shall be conducted in accordance with ASTM D4982-89.
- 15. A coliwasa sampler or similar device shall be used to obtain a representative sample from each drum.
- 16. A maximum of 579 55-gallon product, non-hazardous waste and empty containers may be maintained within the secondary containment system. The containers shall only contain the hazardous constituents permitted for storage in the hazardous waste storage area and shall not contain materials that are incompatible with any waste or other materials stored nearby in other containers unless separated from the other material and protected from them by means of a dike, berm, wall, or other devices. In addition, containers of ignitable and combustible (NFPA definition) product shall not be stored in the secondary containment area.
- 17. Calibration procedures for monitoring equipment shall be conducted in accordance with the latest edition of SW-846.
- 18. Ignitable, reactive and/or corrosive wastes shall not be accepted.
- 19. A maximum combination of 300 55-gallon drums of product and/or non-hazardous waste may be stored in the hazardous waste container storage area in accordance with Detrex's state operating Permit. The drums must be stacked 2-high.
- 20. Incoming waste must be shipped off-site or placed in permitted storage within 24 hours of the shipment arriving on-site.
- 21. The waste in containers may not be consolidated or combined.
- 22. An aisle space of 30 inches must be maintained in the container storage area.

23. Non-bulk containers that are empty or contain non-hazardous waste or product may be stacked to a maximum of 3-high.
24. Containers may be stacked provided that:
 - a. Only the same size or smaller containers are stacked on top of the containers beneath, and;
 - b. Containers are separated by a pallet or other dunnage to provide stability; or
 - c. Stacked in a staggered fashion.
25. Containers may be stored a maximum of ten (10) feet high provided the following inspection and record keeping procedures are used:
 - a. The containers shall be clearly marked with the date received prior to being placed into storage.
 - b. The date on each container must be clearly visible from the ground level inspection aisle, or in the event a group of containers arrives on site shrink wrapped or banded together and are not separated prior to storage, the date may be marked on the group in lieu of each individual container, provided the date is clearly visible from the ground level inspection aisle.
 - c. Each container stacked in an arrangement which is greater than 6.5 feet high shall be inspected daily for the following concerns:
 - i. Condition of the containers.
 - ii. Structural integrity of the containers.
 - iii. Signs of leakage.
 - iv. Missing bungs/tops.
 - v. Signs of corrosion.
 - vi. Stability of the pile.
 - vii. Visibility and readability of the label and date received.

26. The inspection identified in II(B)(21) above shall be conducted from a freestanding ladder, scaffold or other free standing device which allows the inspector to view the top of the containers (i.e., greater than 10 feet).
27. No container shall be stacked within this arrangement in a manner which compromises the integrity of the package.

C. CONDITION OF CONTAINERS --

1. If a container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste or product from this container to a container that is in good condition or manage the waste in accordance with the approved permit application.
2. Any transfer of waste which was required to comply with I(C)(1), shall be recorded in the facility's operating record.
3. Packaging of all wastes accepted for storage in the container storage area shall meet the requirements of 49 CFR 172, 178 and 179 and all applicable D.O.T. and N.F.P.A. regulations. All containers shall be labeled or placarded (non-bulk vs. bulk) in accordance with 49 CFR 172.
4. The contents of each container shall be clearly identified on the side of the container in accordance with 49 CFR 172 prior to being placed in the container storage area.

D. COMPATIBILITY OF WASTE WITH CONTAINERS -- The Permittee must use a container made of or lined with material which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

E. MANAGEMENT OF CONTAINERS -- The Permittee shall comply with the following management practices:

1. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must always be closed during storage, except when it is necessary to add or remove waste.
2. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

F. INSPECTION

The Permittee shall inspect the container area daily, in accordance with the inspection schedule, specified in Attachment F-2, to detect leaks and deterioration of containers. The containment system shall be inspected weekly and repaired or recoated as soon as possible, if the inspection determines the concrete sealant has deteriorated. The Permittee shall perform a complete inspection of the concrete sealant yearly and perform annual maintenance to insure the integrity of the lining.

G. CONTAINMENT -- The Permittee shall construct, operate, and maintain the containment system according to the design plans and operating specifications contained in the approved permit application.

H. CLOSURE -- At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the containment system. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify Illinois EPA's DLPC in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the storage area has been properly decontaminated. This plan must be approved by Illinois EPA's DLPC in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from Illinois EPA will approve and establish:
 - a. The sampling and decontamination plan;
 - b. What contaminants must be analyzed for;
 - c. Analytical requirements (SW-846 Methods should be utilized); and
 - d. The level at which decontamination or removal is considered complete.
2. All sweepings, wash water and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721.

3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.
4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
6. Within sixty (60) days after closure of the container storage area is complete, the Permittee shall submit certification to Illinois EPA that the unit has been closed in accordance with the approved closure plan.

The closure certification forms in Attachment B to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until Illinois EPA approves the closure certification for the unit. Illinois EPA's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.

- c. Copies of the waste manifests.
 - d. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.
 - e. A chronological summary of closure activities and the cost involved.
 - f. Tests performed, methods and results.
 - g. Color photographs of closure activities which document conditions before, during and after closure.
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
9. If Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store on-site generated

hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials in the same container.

Incompatible wastes or materials must not be placed in the same container to prevent reactions which:

- a. Generate extreme heat or pressure, fire or explosions, or violent reactions
- b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
- c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions
- d. Damage the structural integrity of the device or facility
- e. Through other like means, threaten human health or the environment.

The basic methods for preventing such reactions are to:

- a. Treat one or both of the incompatible wastes/materials to render them compatible prior to placing them in the container
 - b. Physically separate the incompatible wastes/materials in the containers so that it is not possible for the incompatible wastes/materials to come in contact with each other.
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
 3. The Permittee shall not store containers holding a hazardous waste or product that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments unless separated from the other material or protected from them by means of a dike, berm, wall, or other devices.

J. CONTINGENCY PLAN - ADDITIONAL SPECIAL CONDITIONS

1. The Permittee shall implement the facility contingency plan contained in the approved permit application any time there is (1) a release of hazardous waste or hazardous constituents which could threaten human health or the environment, (2) a release of hazardous waste or hazardous constituents which is equal to or greater than the Reportable Quantity (RQ), (3) a fire or explosion which involves hazardous waste or which occurs in areas where hazardous wastes are stored, or (4) a release of hazardous waste or hazardous waste constituents which, based on the air dispersion modeling results contained in the contingency plan, would be expected to result in exposure above an OSHA short term exposure limit to unprotected persons. (This would not apply to responding personnel who employ the proper personal protective equipment (PPE)).
2. The Permittee shall contact the local emergency response entities as soon as possible after implementation of the contingency plan:
 - a. The entities which must be notified include:
 1. Melrose Park Fire Department
 2. Melrose Park Police Department
 3. Local ESDA Coordinator
 4. Illinois Emergency Management Agency
 - b. The information which must be initially relayed to each entity includes:
 1. The type of emergency (release, fire or explosion);
 2. The type of wastes or product involved in the emergency and the approximate quantity involved;
 3. An initial assessment of the conditions at the site;
 - c. If the Permittee is able to properly respond to the emergency without any aid from the entities identified in Condition 2.a above, the Permittee shall notify each of these entities that the emergency situation no longer exists once all required emergency response and cleanup activities have been completed. This condition does not preclude the need to initially notify the entities in 2.a above.

3. The Permittee shall review all components of the contingency plan with the local emergency response entities at least once every twelve months. Copies of the meeting notes and list of attendees shall be placed in the facility's operating record and be available to Illinois EPA for review upon verbal or written request.

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SECTION III
STANDARD CONDITIONS
GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by Illinois EPA. (35 IAC 702.142 and 703.125)
7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 35 IAC 703.181-703.209) and through no fault of the Permittee Illinois EPA has not issued a new permit as set forth in 35 IAC 702.125.

8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to Illinois EPA, within a reasonable time, any relevant information which Illinois EPA may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to Illinois EPA, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of Illinois EPA, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

13. MONITORING AND RECORDS. (35 IAC 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of Illinois EPA at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical technique(s) or method(s) used; and
 - vi. The result(s) of such analyses. (35 IAC 702.150)

14. REPORTING PLANNED CHANGES. The permittee shall give notice to Illinois EPA as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of

hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:

- a. The permittee has submitted to Illinois EPA by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- b.
 1. Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
 2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from Illinois EPA of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))

15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to Illinois EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:

- i. The permittee has submitted to Illinois EPA by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- ii. Either:
 - a. Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - b. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from Illinois EPA of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 702.152(b) and 703.247)

16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to Illinois EPA. Illinois EPA may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))

17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))
18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))
19. TWENTY-FOUR HOUR REPORTING.
 - a. The Permittee shall report to Illinois EPA any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
 - b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.
 - c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a

description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. Illinois EPA may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))

20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to Illinois EPA, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
 - a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to Illinois EPA a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
 - b. Unmanifested waste report: The permittee must submit to Illinois EPA within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)
 - c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)
23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency
Division of Land Pollution Control #24
Planning and Reporting Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to Illinois EPA shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)
25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.
26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
 - a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
 - b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
 - c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
 - d. Closure plan as required by 35 IAC 724.212(a) and this permit.
 - e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
 - f. Operating record as required by 35 IAC 724.173 and this permit.
 - g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.
27. WASTE MINIMIZATION. The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

GENERAL FACILITY STANDARDS

28. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify Illinois EPA in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. NOTICE OF WASTE FROM OFF-SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
30. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. SECURITY. The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. GENERAL REQUIREMENTS. The Permittee shall not store ignitable, reactive, or incompatible wastes at the facility.

PREPAREDNESS AND PREVENTION

35. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)
36. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.

37. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

CONTINGENCY PLAN

41. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to Illinois EPA as required by 35 IAC 724.156(j).
42. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 IAC 724.153.
43. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
44. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

45. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172 and 724.176.
46. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
47. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to Illinois EPA prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

CLOSURE

48. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
49. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
50. NOTIFICATION OF CLOSURE. The Permittee shall notify Illinois EPA at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
51. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
52. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
53. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to Illinois EPA in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
54. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:

- a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.
 - b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
 - c. Kept on record at the facility and updated. (35 IAC 724.242)
55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by Illinois EPA pursuant to 35 IAC 724.243.
56. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 IAC 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

58. DISPOSAL PROHIBITION. Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with non-restricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
59. DILUTION PROHIBITION. The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).
60. WASTE ANALYSIS.
1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

61. STORAGE RESTRICTIONS

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

62. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

SECTION IV CORRECTIVE ACTION

A. INTRODUCTION

In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents from any solid waste management unit (SWMU) at its facility in Melrose Park, Illinois. This shall be accomplished by:

1. Completing a RCRA Facility Investigation (RFI) to determine whether releases of hazardous wastes and hazardous constituents have occurred from any solid waste management unit (SWMU) at its facility, and if so, the nature and extent of the release(s).
2. Based upon the results of the RFI, developing and implementing a Corrective Measures Program, which describes the necessary corrective measures, which will be taken. The required corrective measures shall be those measures necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any of the SWMUs determined to pose an environmental threat by the RFI required under the terms and conditions of this permit.

B. CONDUCTING THE RCRA FACILITY INVESTIGATION

The Permittee must conduct a RCRA Facility Investigation (RFI) to determine the nature and extent of releases of hazardous wastes and hazardous constituents from certain SWMUs at the subject facility.

1. An RFI Phase I workplan for this facility was approved by Illinois EPA on June 17, 1993, modifications to this plan were approved by Illinois EPA on September 10, 1993. The solid waste management units to be investigated were:
 - a. Waste Handling Area (SWMU #1)
 - b. Fuel Spill Area (SWMU #2)
 - c. Tank Car Unloading Area (SWMU #3)

d. Potential UST Area (SWMU #4)

A drawing showing the location of these units within the facility is provided in Attachment D-1.

2. A report documenting the results of the Phase I RFI was approved by Illinois EPA on June 15, 1994. The results of the Phase I RFI indicated that additional investigation was necessary to fully characterize the extent of the releases of the 4 SWMUs of concern.
3. An RFI Phase II workplan for the 4 SWMUs of concern was approved by Illinois EPA on January 27, 1995.
4. On July 18, 1996, Illinois EPA approved a report documenting the results of the initial stage of the RFI Phase II. Additional RFI Phase II investigative efforts were also approved.
5. On January 22, 1997, Illinois EPA approved a Scope of Work for Stage II of Phase II RFI.
6. Detrex has submitted reports entitled "Phase II Stage II Investigative Summary and Tier 1 Screening Evaluation" and "Tier 2 TACO Analysis for Detrex RCRA Facility" which are currently under review by Illinois EPA.
7. The Agency's DLPC will review the data contained in the reports identified in Condition B.6 above and notify the Permittee in writing of the results.
 - a. If the Agency determines that there is a potential that groundwater has been impacted by a release of hazardous wastes or hazardous constituents from any SWMU evaluated during the Phase I or Phase II investigation, then the Permittee must conduct Phase III of the RFI for such SWMUs. The purpose of the Phase III investigation of the RFI will be to (1) determine if groundwater has been impacted at such SWMUs and (2) the extent of any detected release. The requirements associated with a Phase III Investigation are contained in Attachment D-2 to this permit.
 - b. If the Agency's DLPC determines that a RFI Phase III investigation is not required, based on data obtained from the RFI Phase II investigation, the Agency reserves the right to require that corrective measures be conducted for the SWMU(s) of concern to address releases identified through the Phase I and Phase II investigations.

- c. The Agency's response to the Phase II report will:
 - i. Identify those SWMUs for which Phase III of the RFI must be conducted; and,
 - ii. Identify those SWMUs and associated environmental media for which corrective action is required, although no Phase III investigation is required.
 - d. Agency action on the final RFI Phase II report will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
8. Within 90 days of notification of the need for a Phase III investigation, the Permittee shall submit a plan for conducting Phase III of the RFI. The Scope of Work which should be followed in developing this work plan is provided in Attachment D-2. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase III Workplan.
- a. Within 60 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval.
 - b. Within 60 days of the Agency's DLPC approval of the RFI Phase III Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established within the Workplan.
 - c. Agency action on the Phase III workplan will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
9. The Permittee must submit a report documenting the efforts carried out in accordance with the approved RFI Phase III Workplan in accordance with the schedule set forth in that workplan.
10. Following submittal of the RFI Phase III report, the Agency's DLPC will review the data contained in the report and notify the Permittee in writing of the results.
- a. If the Agency determines that there has been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater, then the Permittee must perform corrective measures, as necessary, to protect human health and the environment. Additional corrective measures will also be required to address the source of the groundwater contamination of the groundwater.

- b. If the Agency determines that there (1) has not been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater and (2) is no potential for releases of hazardous waste or hazardous constituents from a SWMU to the groundwater, then no corrective measures will be required at that SWMU relating to groundwater. However, corrective measures may be necessary to address the waste and/or contaminated soil present at the SWMU.
- c. If the Agency determines that (1) there has not been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater (2) but there is a potential for future releases of hazardous waste or hazardous constituents from a SWMU to the groundwater, then the Agency may require a longer term groundwater monitoring program at any SWMU where substantial soil contamination exists (as determined by the Agency), or at any SWMU which would meet the definition of a land disposal unit. This additional monitoring need for this is dependent on the corrective action taken in response to the waste and/or contaminated soil present at the SWMU.
- d. The Agency's response to the Phase III report will:
 - i. Identify those SWMUs investigated as part of Phase III of the RFI from which there has been a release of hazardous waste or hazardous constituents to groundwater that requires corrective measures;
 - ii. Identify those SWMUs investigated as part of Phase III of the RFI for which no corrective measures is required for groundwater at this time;
 - iii. Identify those land-based SWMUs investigated as part of the Phase III RFI for which a longer term groundwater monitoring program must be established as a corrective measure. "Land-based SWMUs" are SWMUs where waste, contaminated soil and/or contaminated groundwater are allowed to remain in-place.
- e. Agency action on the Phase III Workplan will be subject to the appeal provisions of Sections 39(a) of the Illinois Environmental Protection Act.

C. CORRECTIVE MEASURE REQUIREMENTS

- 1. If it is determined that corrective measures must be taken in response to any SWMU investigated during the RFI, then the Permittee shall implement a Corrective Measures Program (CMP) for such SWMUs. The corrective measures implemented by the Permittee must be sufficient to ensure the requirements of 35 Ill. Adm. Code 302, 620,

724 and 742 are met. The requirements for implementing a CMP are set forth in Attachment D-3.

- a. A Phase I CMP report, or its equivalent, must be submitted to Illinois EPA within ninety (90) days of written notification of the need for implementation of a Corrective Measures Program.
 - b. Subsequent plans and reports must be submitted to Illinois EPA for review and approval in accordance with an approved schedule.
 - c. Phases must be combined and/or skipped, depending on the actual corrective measure selected. The overall CMP implemented at a given SWMU must: (1) be logical in nature; (2) meet the requirements set forth in Attachment !VAR!; and (3) allow for Illinois EPA oversight and approval throughout the entire process.
2. Illinois EPA action on all corrective measure program submittals shall be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.

D. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such a cost estimate will be based upon the cost of contamination investigations and assessments for the SWMU(s), and design, construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) to meet the requirements of 35 IAC 724.201 and this permit. This cost estimate must be submitted to the Agency's DLPC with each RFI or CMP workplan.
2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition the words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the Agency's approval of the initial or revised cost estimates required under Condition D.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that acceptable under 35 IAC 724.246 at its discretion.

E. FUTURE RELEASES FROM SWMUs

There exists a potential that a release may occur in the future from SWMUs identified in the RFA which did not require any corrective action at the time that the RFA or RFI was completed. If the Permittee discovers that a release has occurred from such a SWMU in the future, then the Agency must be notified of this release within thirty (30) days after its discovery. Upon the Agency's written request, the Permittee shall implement a corrective action program for that SWMU in accordance with the procedures set forth in Subsections B and C above, beginning on the date of notification, rather than on the effective date of the permit.

F. NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60) calendar days after discovery. The notification shall provide the following information, as available:
 - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
 - b. The type and past and present function of the unit;
 - c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);
 - d. The period during which the unit was operated;
 - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and
 - f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit.
2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU, the Agency's DLPC may request in writing, that the Permittee prepare a Solid Waste Management Unit

(SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit.

3. Within 90 calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall submit a SWMU Assessment Plan consistent with the requirements of Subsection B above. This SWMU Assessment plan must also propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the newly-identified SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.
4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with conditions or disapprove the Plan in writing. If the plan is approved, the Permittee shall begin to implement the Plan within forty-five (45) calendar days of receiving such written notification. If the Plan is disapproved, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies specify a due date for submittal of a revised plan.
5. The Permittee shall submit a report documenting the results of the approved SWMU Assessment Plan to the Agency's DLPC in accordance with the schedule in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan.
6. The Permittee must implement a Corrective Measures Program, as necessary, to properly address any contamination encountered during the assessment. This program must be carried out in general accordance with the procedures set forth in Subsection C above.

G. INTERIM MEASURES

At any time during the RFI, the Permittee may initiate additional interim measures for the purpose of preventing continuing releases and/or mitigating the results of releases and/or mitigating the migration of hazardous wastes or hazardous constituents. It shall not be necessary to conduct all phases of the RFI investigation prior to implementing an interim measure if the Agency's DLPC and the Permittee agree that a problem can be corrected, or a release cleaned up, without additional study and/or without a formal CMS.

1. Prior to implementing any interim measures beyond those specified above, the Permittee must submit detailed information regarding the proposed interim measure to the Agency's DLPC for approval. This information shall include, at a minimum:
 - a. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long-term solution at the facility;
 - b. Design, construction, and maintenance requirements;
 - c. Schedules for design and construction; and
 - d. Schedules for progress reports.
2. If the Agency's DLPC determines that a release cannot be addressed without additional study and/or a formal CMS, then the Agency's DLPC will notify the Permittee that these must be performed. Any proposal made under this provision or any other activity resulting from such proposal, including the invocation of dispute resolution, shall not affect the schedule for implementation of the RFI or of any other portion of the permit.
3. If the Agency determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

SECTION V
REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section I: CONTAINER STORAGE		
H.1.	Notify Illinois EPA of intent to close container storage area.	At least 180 days prior to commencement of closure.
H.1.	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
H.4.	Submit application for modification of permit and closure and post-closure care plan.	No later than 60 days after determination that container storage area cannot be clean closed.
H.5.	Update financial assurance.	No later than 30 days after permit modification is effective.
H.6.	Submit certification for closure of container storage area.	No later than 60 days after closure of container storage area is complete.
Section II: STANDARD CONDITIONS		
6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Illinois EPA and copies of records required to be kept by this permit.	Reasonable time.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
14	Notify Illinois EPA of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Illinois EPA of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Illinois EPA any non-compliance which may endanger health or environment.	
	telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
28	Notify Illinois EPA in writing of expected receipt of hazardous waste from foreign source.	At least 4 weeks prior to receipt of waste.
41	Implementation of Contingency Plan.	
	Notify appropriate state and local agencies with designated response roles.	As needed.
	Notify appropriate local officials.	Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
	Notify Illinois EPA (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion which could threaten human health or the environment, outside the facility.	Immediately after determination made.
	Notify Illinois EPA and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h).	Prior to resuming operation in affected areas.
	Report to Illinois EPA details regarding incident which required implementation of contingency plan.	Within 15 days after event.
47	Submit annual report required by 35 IAC 724.175.	March 1 of each year.
49	Application for permit modification amending closure plan.	
50	Notify Illinois EPA that expecting to close.	At least 180 days prior to beginning closure.
54(a)	Adjust closure cost estimate for inflation.	Within 30 days after anniversary date.
54(b)	Revision of closure cost estimate.	As needed.
55	Change in financial assurance mechanism for closure.	
56	Change in coverage for sudden and non-sudden accidental occurrences.	

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
57	Notify Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding.
Section III: CORRECTIVE ACTIONS		
B	RCRA Facility Investigation (RFI) Phase I Workplan	Within 90 days after the effective date of this permit.

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SECTION VI
SPECIAL CONDITIONS

1. All hazardous and non-hazardous special wastes generated by this facility and transported off-site for recycling, treatment or disposal must be transported in accordance with the uniform permit or non-hazardous special waste hauling permit and Illinois manifest system, the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809.
2. Special wastes received at the site for storage/transfer shall be transported to the facility utilizing Illinois manifest system.
3. All loading/unloading of special wastes shall be accomplished over spill containment devices which are constructed of non earthen materials and have been coated with a compatible impermeable coating and has been sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation.
4. The permittee shall perform a complete inspection of the surface coating or lining yearly and perform annual maintenance to insure the integrity of the coating.
5. It shall not be an act of non-compliance if the coating or lining of the container storage area secondary containment system has been installed properly but does not live up to the manufacture's printed performance standards and/or if the coating or lining fails due to excessive wear or chemical breakdown. The Permittee shall notify Illinois EPA within thirty (30) days of becoming aware of the failure. The facility shall request modification of its permit to install a new coating within 180 days.
6. The Permittee shall inspect the areas where tank trucks are unloading after each use. Any release of waste observed during these inspections must be responded to immediately. Such response shall include containing and collecting the released material and removing all contaminated material.
7. The Permittee shall cover the manhole located in the driveway with a polypropylene cover before loading/unloading of special waste.

SECTION VII
AIR EMISSION STANDARDS FOR CONTAINERS

- A. Whenever hazardous waste is in a container using Container Level 1 or 2 controls, the permittee shall install all covers and closure devices for the container and secure and maintain each closure device in closed position except:
1. Opening of a closure device or cover for a container is allowed for the purposes of adding/removing hazardous waste or material as follows:
 - a. In the case where the container is filled to the intended final level in one continuous operation, the permittee shall promptly secure the closure devices in the closed position and install the covers upon conclusion of the filling operation.
 - b. In the case where discrete quantities or batches of material intermittently are added to the container over a period of time, the permittee shall promptly secure the closure devices in the closed position and install covers upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
 - c. An empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time.
 - d. In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 35 Ill. Adm. Code 721.107(b), the permittee shall promptly secure the closure devices in the closed position and install covers upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
 2. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste.
 3. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or

similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications.

4. Opening of a safety device is allowed at any time conditions require doing so to avoid an unsafe condition.
- B. The permittee shall inspect the containers and their covers and closure devices as follows:
1. In the case when a hazardous waste already is in the container at the time the permittee first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, the permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility.
 2. In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the permittee shall visually inspect the container and its cover and closure device initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.
 3. When a defect is detected for the container, cover, or closure devices, the permittee shall make first efforts at repair of the defect no later than 24 hours after detection and repair must be completed as soon as possible but no later than five calendar days after detection. If repair cannot be completed within five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage hazardous waste until the defect is repaired.

ATTACHMENT A

WASTE LISTS AND HAZARDOUS WASTE
IDENTIFICATION NUMBERS

ILD074424938

LPC #0311860003

Part B Log #113

ATTACHMENT A

All wastes accepted at the Facility are halogenated organic hazardous wastes under 35 Ill. Adm. Code 721 classified as F001 or F002 and the corresponding U codes for those materials. The wastes may also be dually classified as D-series wastes with respect to TCLP parameters.

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE

F001

The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane and trichlorotrifluoroethane; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F002

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, and 1,1,2-trichloro-1,2,2-trifluoroethane; all spent solvent mixtures and blends containing before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

U080

dichloromethane

U121

trichloromonofluoromethane

U210

tetrachloroethylene

U226

1,1,1-trichloroethane

U228

trichloroethene

D039

tetrachloroethylene

D040

trichloroethylene

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ATTACHMENT A

The waste codes listed below represent potential underlying constituents and are not accepted without primary waste codes.

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE
BASED ON TOXICITY
CHARACTERISTICS

D004	Arsenic
D005	Barium
D018	Benzene
D006	Cadmium
D019	Carbon Tetrachloride
D021	Chlorobenzene
D007	Chromium
D027	1,4-Dichlorobenzene
D028	1,2-Dichloroethane
D029	1,1-Dichloroethylene
D030	2,4-Dinitrotoluene
D034	Hexachloroethane
D008	Lead
D009	Mercury
D035	Methyl ethyl ketone
D010	Selenium
D011	Silver
D038	Pyridine

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ATTACHMENT B
CLOSURE CERTIFICATION FORMS

ILD074424938

LPC #0311860003

Part B Log #113R

ATTACHMENT B

This statement is to be completed by both the responsible officer and by ~~the~~ registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registration Number

Date

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ATTACHMENT C
INSPECTION SCHEDULE

ILD074424938

LPC #0311860003

Part B Log #113R

TABLE I: INSPECTION SCHEDULE
FOR HAZARDOUS WASTE STORAGE AREA

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Check container placement, stacking, aisle space and segregation	Daily	Visual
2. Check containers for adequate seals, open lids, and loose bungs	Daily	Visual
3. Check container labels	Daily	Visual
4. Check containers for corrosion, leaks, deformation	Daily	Visual
5. Check pallets for damage	Daily	Visual
6. Check the concrete floor for cracks, deterioration, wet spots	Weekly	Visual
7. Check the concrete ramps and curbs for settlement, cracks, wet spots	Weekly	Visual
8. Check the containment system for spills, leaks, stains	Weekly	Visual
9. Check the locks on gates and doors	Daily	Visual/Physical

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
10. Check the warning signs	Weekly	Visual
11. Check the loading/ unloading area for obstructions, spills, leaks, stains	Daily (When in use)	Visual

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TABLE II: INSPECTION SCHEDULE
FOR EMERGENCY AND SAFETY EQUIPMENT

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Absorbent Material	Weekly	Visual
2. Forklift	Weekly	Visual/Physical
3. Fire Extinguishers	Weekly	Visual
4. First Aid Kit	Weekly	Visual
5. Eye Wash Station/ Safety Shower	Weekly	Visual/Physical
6. Self-contained Breathing Apparatus	Weekly	Visual/Physical
7. Protective Clothing	Weekly	Visual
8. Two-way Radios	Daily	Visual/Physical
9. Alarm System	Monthly	Visual/Physical
10. Polypropylene Pad	Weekly	Visual

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ATTACHMENT D

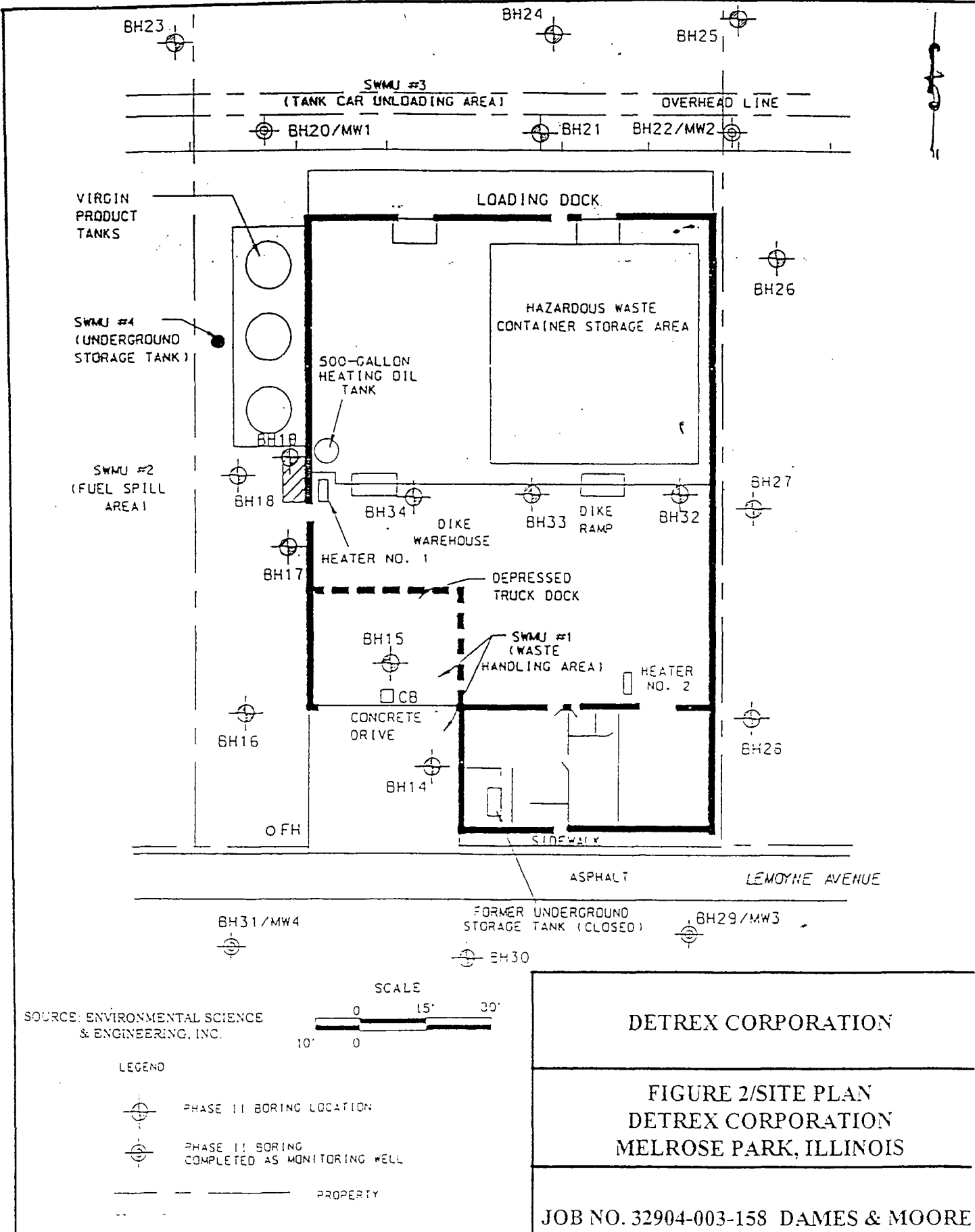
REQUIRED SCOPE OF WORK FOR a RCRA

FACILITY INVESTIGATION

ILD074424938

LPC #0311860003

Part B Log #113R



Attachment D.2
Scope of Work for a RCRA Facility Investigation
Detrex Corporation

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) for this permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Detrex, and "SWMU" refers to Solid Waste Management Unit.

I. PURPOSE

The purpose of the RFI is to determine the nature and extent of releases of hazardous waste or hazardous constituents from SWMUs located at Detrex facility in Melrose Park, Illinois and to gather data necessary to develop and implement a Corrective Measures Program (CMP). Specifically, the information gathered during the RFI will be used to help determine the need, scope and design of a corrective measures program.

II. RFI WORKPLANS

Detrex shall prepare a detailed workplan for the Phase III RFI which is reviewed and approved by the Agency prior to conducting the Phase III RFI. The workplan must, at a minimum, contain the information identified in III.A-III.H below. The information in the workplan must be presented in a manner which is similar to the format set forth in these sections. Information provided in previous RFI workplans may be incorporated the workplan by reference; information already submitted in the Part B permit application may also be incorporated by reference. When incorporating information by reference, a clear reference must be made to the location of the information in the document, including page number and date information was submitted.

II.A. INTRODUCTION (required for all workplans)

A general discussion of the contents and goals of each workplan must be provided as an introductory portion of the workplan. This introduction should also discuss, in general, the facility and the SWMUs being investigated.

II.B. ADMINISTRATIVE OUTLINE

Detrex shall submit as part of the RFI workplan a general outline defining the RFI objectives, technical approach, and scheduling of tasks during that phase of the RFI. Detrex shall prepare a Project Management Plan which will include a discussion of the technical

approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel.

II.C. NATURE AND EXTENT OF CONTAMINATION

The Phase III Workplan must contain the following information, to the extent known for each SWMU of concern.

- a. Location of unit;
- b. The horizontal and vertical boundaries of each unit;
- c. Details regarding the construction, operation and structural integrity of each unit;
- d. A description of all materials managed and/or disposed at each SWMU including, but not limited to, solid waste, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility including:
 - (1) Type of waste or hazardous constituents placed in the units, including source, hazardous classification, quantity and chemical composition;
 - (2) Physical and chemical characteristics, including physical form, physical description, general chemical class, cohesiveness of the waste;
- e. Quantities of solid and hazardous wastes managed at the unit;
- f. The history of the utilization of each SWMU and the surrounding areas, including the period of operation and age of the unit;
- g. Methods used to close the unit, if applicable;
- h. All available data and qualitative information on the level of contamination present at the SWMU;
- i. A description of the existing degree and extent of contamination at each unit area.

II.D. SOIL SAMPLING/ANALYSIS PLAN

The Phase III Workplan must provide for a determination of the extent of releases of hazardous waste and hazardous constituents into the soil around and under each SWMU. To meet this requirement, the plan must identify:

- a. The procedures which will be used to describe and characterize the soils in and around the subject SWMU(s) down to the water table, including, but not limited to, the following:
 1. Unified Soil Classification;
 2. Soil profile; and
 3. Elevation of water table;
- b. The parameters and hazardous constituents to be used to establish the presence or absence of contamination. These must include, but are not limited to, specific hazardous constituents of wastes known or suspected to have been managed by the SWMU(s) as identified and determined by the unit characterization information presented in the workplan.
- c. The basis for selecting the parameters and constituents in (b) above.
- d. The methodology for choosing sampling locations, depths, and numbers of samples.
- e. Sampling procedures for each parameter or constituent to be analyzed. Unless detailed procedures are otherwise contained in the workplan, all soil samples collected must be handled in accordance with Test Methods for Evaluating Solid Waste, Third Edition and finalized updates (SW-846) and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed.
- f. Analytical methods to be used in the analysis of the samples. The procedures set forth in SW-846 shall be followed. Otherwise a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods must be provided.
- g. Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.

II.E. HYDROGEOLOGIC AND HYDROLOGIC INVESTIGATION SAMPLING AND ANALYSIS PLAN

The Phase III hydrogeologic and geologic investigation plan must provide descriptions of groundwater monitoring systems which will provide adequate data on the detection, nature, extent and rate, and concentration of any release to the groundwater at the facility at the SWMU of concern.

The information which must be provided regarding the Phase III investigation of hydrogeology and hydrology at each SWMU identified above includes:

- a. Information, as it is available, regarding:
 - (1) The regional geologic and hydrogeologic characteristics in the vicinity of the facility, including stratigraphy, hydrogeologic flow and the areas of recharge and discharge.
 - (2) Any topographic or geomorphic features that might influence the groundwater flow system;
 - (3) The hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; and interpretation of hydraulic interconnections between saturated zones, and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;
 - (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
 - (5) The water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and

- (6) Any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures within 1500 feet of the facility boundary.
- b. Procedures for obtaining information identified above which was not obtained during preparation of the workplan.
 - c. Documentation that sampling and analysis of groundwater monitoring wells will be carried out in accordance with the approved Data Collection Quality Assurance Plan. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD), where appropriate, and the latest version of the Agency's DLPC design criteria. At a minimum:
 - (1) The groundwater monitoring wells must consist of monitoring wells installed in the uppermost aquifer and in each underlying aquifer (e.g., sand units) which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMUs, except to the extent that SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are (a) representative of background quality in the uppermost aquifer and units hydraulically interconnected beneath the facility and (b) not affected by SWMUs at the subject facility; and
 - (3) Monitoring wells in each appropriate aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations and depths must ensure that they allow for detection of releases of hazardous waste or hazardous constituents from the SWMU(s).
 - d. A sampling plan which specifies:
 - (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes determined to have been placed in or released from the SWMUs (including any possible degradation products);
 - (2) The basis for selecting the parameters and constituents in (1) above;

- (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths, and concentration specifications for each monitoring well;
- (4) Sampling procedures for each parameter or constituent to be analyzed, including sampling frequency;
- (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods will be provided; and
- (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.

II.F. SITE-SPECIFIC SAMPLING PLANS

Detrex shall prepare detailed site-specific sampling plans to be submitted as part of the work for each phase of the RFI which address all field activities needed to obtain site-specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever appropriate, sample collection, handling, preservation, preparation and analysis described in Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, Third Edition (SW-846) and finalized updates. In addition, samples to be analyzed for volatile organic compounds must be collected in accordance with Illinois EPA's Volatile Sampling. The plans must address all levels of the investigations, as well as types of investigations conducted on specific environmental media (i.e., soil, air, surface water, groundwater). The plans must describe in detail how each phase of the RFI will be implemented.

Site-Specific sampling and analysis plan should contain the following informational:

1. Goals and Objectives of Effort - A discussion of the goals and objectives of the sampling/analysis effort should be included in the plan. This will have an impact on the overall plan, as the sampling/analysis effort required to demonstrate that an area is clean is very different than that required to determine the horizontal and vertical extent of contamination.
2. Parameters to be Analyzed - A list of proposed parameters along with a discussion justifying their inclusions should be included in the plan. The proposed parameters should include those hazardous constituents which may be present based upon a knowledge of the wastes managed at the unit and the facility overall. This list should

include degradation products. Additional parameters for analysis may be required by the Agency, depending on its review of the wastes and other materials managed at the facility.

3. Sample Locations - A scaled map should be provided in the plan showing the location where the samples are to be collected.
4. Sampling Depth - As appropriate, the sampling should identify the depth from which each sample is to be collected.
5. Sample Collection Procedures - The procedures which will be used to collect the samples must be described in the closure plan. The following should be considered in developing these procedures:
 - a. Sampling methods and equipment should follow guidance in USEPA's TEST METHODS FOR EVALUATING SOLID WASTE. PHYSICAL/CHEMICAL METHODS Third Edition and all finalized updates.
 - b. Field sampling methods not included in SW-846 must be approved by IEPA before they are used in the closure. This includes methods such as drilling, borings, etc. When available, standards procedures, as defined by USEPA, IEPA or ASTM, should be followed.
 - c. Soil and sediment samples collected for volatile organics analysis require specialized sampling and handling procedures, as specified in the Agency's volatile compound sampling procedure. Unless extenuating circumstances dictate otherwise, soil samples collected for volatile organic analysis should not be mixed, composited or otherwise aerated. If extenuating circumstances prevail, then procedures must be made to minimize (1) the time the sample is exposed to the air; (2) aeration of the sample and (3) agitation of the sample. No mixing or compositing of samples should ever take place if they are to be analyzed for VOCs.
 - d. All soil encountered during the sampling effort should be field classified in accordance with ASTM D-2488. Provisions should be made in the plan to make this classification, except for samples collected specifically for VOC analysis.
 - e. If a drill rig or other piece of equipment is necessary to collect soil samples:
 1. The procedures specified in ASTM Method D-1586 (Split Spoon Sampling) or D-1587 (Shelby Tube Sampling) must be used in collecting the samples;

2. Soil samples should be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.
- f. Soil and sediments encountered in an area where VOC contamination is a concern should be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory should not be field-screened.
- g. In general, samples should never be composited.
- h. The procedures which will be used to decontaminate the sampling equipment after each sample is collected should also be described. Decontamination procedures should be carried out in accordance with SW-846.
- i. The actual material placed in the container for future analysis should be obtained from any visually contaminated portion of the sample.
6. Sample Handling Procedures - The sampling plan should describe the procedures which will be used to store, preserve and transport the collected soil samples to the laboratory, including chain-of-custody procedures. These procedures should be carried out in accordance with the guidance in SW-846, Third Edition and all finalized updates.
7. Analytical Procedures - The sampling/analysis plan should identify the procedures which will be used to prepare the samples for analysis and to analyze them. In general, such procedures should be carried out in accordance with those set forth in SW-846, Third Edition, and all finalized updates. The actual portion of the sample to be analyzed should be obtained from visually contaminated material if any is present. The procedures specified must be sufficient to analyze for all the parameters identified in the closure plan. The estimated quantitation limits and/or practical quantitation limits to be achieved should also be identified. Again, these limits should meet the requirements set forth in SW-846. It must be noted that it is especially important to achieve low detection limits if the goal of the sampling/analysis effort is to demonstrate that little or no contamination exists in a given area. To demonstrate a parameter is not present in a sample, the PQL achieved must be at least as low as that specified in SW-846. Low detection limits may not be as necessary when collecting samples in contaminated areas.
8. Any additional items required in the other portions of this section regarding the sampling/analysis of specific environmental media.

II.G. DATA COLLECTION QUALITY ASSURANCE

Detrex shall prepare a plan which describes the procedures which will be used to carry out and monitor all sampling and analysis efforts to ensure that all information and data collected are technically sound, statistically valid and properly documented. Such a plan, referred to as a Quality Assurance Project Plan, must be developed using a format in which the fourteen items listed below are discussed in detail:

1. Project Description
2. Project Organization and Responsibility
3. Quality Assurance Objectives for Data Measurements
4. Sampling Procedures
5. Sample Custody
6. Calibration Procedures and Frequency
7. Analytical Procedures
8. Data Reduction, Validation and Reporting
9. Internal Quality Control Audits
10. Performance and System Audits
11. Preventative Maintenance
12. Specific Routine Procedures Used to Assess Data Precision, Accuracy and Completeness
13. Corrective Action
14. Quality Assurance Reports to Management

Of special concern in the development of a QAPP are (1) the use of trip blanks, field blanks and laboratory blanks and (2) calibration and verification of the laboratory procedures and equipment used to analyze the samples. All procedures used in this RFI must meet the requirements of Test Methods for Evaluating Solid Wastes, Third Edition (SW-846), and all

finalized updates. As such, the quality assurance/quality control procedures carried out during the RFI must meet the requirements set forth in SW-846.

II.H. DATA MANAGEMENT PLAN

Detrex shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation(s).

III. IMPLEMENTATION OF RFI

Detrex shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s), Illinois EPA approval letter and the RFI schedule.

IV. FINAL RFI REPORT

- A. Report documenting the results of the Phase III RFI must be developed in accordance with the following:
 1. The portion of the report documenting the results of the required soil/air/surface water/sediment/sampling/analysis effort should contain the following:
 - a. A discussion of: (1) the reason for the sampling/analysis effort conducted at each WMU and (2) the goals of the sampling analysis effort conducted at each WMU;
 - b. A scaled drawing showing the horizontal and vertical location where all samples were collected relative to each SWMU and/or other relevant structures;
 - c. Justification for the selected sample locations;

- d. A description of the procedures used for:
 - (1) Sample collection;
 - (2) Sample preservation;
 - (3) Chain of custody; and
 - (4) Decontamination of sampling equipment;
- e. Visual classification of each soil sample collected for analysis;
- f. A discussion of the results of any field screening efforts;
- g. Logs of all soil borings made during the investigation;
- h. A description of the soil types encountered during the investigation, including scaled cross-sections;
- i. A description of the procedures used to analyze the samples, including:
 - (1) The analytical procedure used, including the procedures, if any, used to prepare the sample for analysis;
 - (2) Any dilutions made to the original sample;
 - (3) Any interferences encountered during the analysis of each sample; and
 - (4) The practical quantitation limit (PQL) achieved, including justification for reporting PQLs which are above SW-846 levels.
- j. A description of all quality control/quality assurance analyses conducted, including the analysis of lab blanks, trip blanks and field blanks;
- k. A description of all quality assurance/quality control efforts made overall;
- l. A tabular summary of all analytical data, including QA/QC results;
- m. Copies of the final laboratory sheets which report the results of the analyses, including final sheets reporting QA/QC data;

- n. Colored photographs documenting the sampling effort; and
 - o. A discussion of the collected data. This discussion should (1) identify those sample locations where contaminants were detected and the concentrations of the contaminants and (2) evaluate the data collected. This discussion should focus on the data collected during the recent investigation and on data previously collected.
2. The portion of the final report documenting the results of the required subsurface and groundwater investigation should contain, at a minimum, the following information for each WMU:
- a. Logs of the borings made during the required subsurface investigation and/or for monitoring well installation;
 - b. A description of the procedures used in carrying out the subsurface investigation (including the boring procedures) and in any installation of the monitoring wells;
 - c. Results of all tests conducted in-situ or in the laboratory and a discussion of the procedures used in carrying out the tests;
 - d. Completed IEPA Well Completion Reports;
 - e. Scaled drawings showing the location where all borings were made and where all monitoring wells were installed;
 - f. Well development procedures;
 - g. A discussion of the geology and hydrogeology of the areas being investigated, including:
 - (1) A detailed description of the geology;
 - (2) Physical characteristics of each geologic strata encountered;
 - (3) Identification of water bearing units encountered;
 - (4) Depth to the water table;
 - (5) The horizontal and vertical components of groundwater flow in the water bearing units;

- (6) The hydraulic conductivity of the water bearing units.
- h. A minimum of two cross-sections depicting the subsurface geology and hydrogeology. These cross-sections should be as close to perpendicular to each other as possible, so that a three-dimensional presentation of this information can be depicted;
 - i. Information regarding the groundwater sampling/analysis effort as identified in Items 1.a, 1.d, 1.f, 1.h, thru 1.l and 1.n above;
 - j. Water level measurements made prior to the collection of the groundwater samples; and
 - k. Maps and supporting data identifying the piezometric surface of the groundwater beneath the facility and the direction of groundwater flow.

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Attachment D.3

Corrective Measures Program Requirements for Detrex

1.0 INTRODUCTION/PURPOSE

At the end of a RCRA Facility Investigation, the concentration of contaminants present at a SWMU or other area of concern is typically compared to corrective action objectives developed in accordance with 35 Ill. Adm. Code 742. If the contaminant levels are above these objectives, then some type of corrective measure must be completed to achieve these objectives. In addition, certain corrective measures may need to be carried out to support the corrective action objectives (i.e., the establishment of engineered barriers and/or institutional controls).

While the above scenario is typically carried out at the end of an RFI for a given SWMU, it is not always the case. Specifically, if waste is to remain in place at a SWMU and it will be closed as a landfill, then the corrective measure for that SWMU would consist of: (1) construction of a final cover over the SWMU; and (2) post-closure care (including groundwater monitoring and as necessary, groundwater remediation) of the closed unit.

This document describes the procedures which must be followed to complete the necessary corrective measures for the SWMUs at the Detrex facility in Melrose Park, Illinois. These procedures, in total, are typically referred to as a Corrective Measures Program (CMP).

2.0 BRIEF OVERVIEW OF THE REQUIRED CORRECTIVE MEASURES PROGRAM

As indicated above, Detrex may eventually be required to develop and implement a corrective measures program to address contamination encountered during the RFI conducted at its facility in Melrose Park, Illinois. To allow for a logical and orderly implementation, the CMP should be implemented in five phases which build on each other. However, it is not necessary for the CMP at a given SWMU or other areas of concern to follow these five phases step-by-step. Rather, phases can be combined and/or skipped, depending on the actual corrective measure selected. The overall CMP implemented must set forth a logical path for its implementation and allow for Illinois EPA oversight and approval throughout the entire process.

A brief discussion of the typical five phases of a CMP is as follows:

1. Phase I is the conceptual design of the selected corrective measure(s).

2. Phase II is the development of final design plans for the corrective measure, including installation and operation/maintenance plans.
3. Phase III is the actual construction/installation of the selected corrective measure.
4. Phase IV is the operation, maintenance, and monitoring of the selected corrective measure to ensure it is properly protecting human health and the environment.
5. Phase V is the final demonstration/verification that the implemented corrective measure: (1) achieved the approved corrective action objectives; or (2) post-closure care for any SWMU closed as a landfill has been properly implemented.

Sections 3.0 through 7.0 which follow provide a more detailed discussion of each of these five phases. Section 8.0 has been developed to describe the corrective measures program which should be used in lieu of the afore-mentioned five phase procedure when soil removal is the selected remedy.

It must be noted that work plans, reports, etc. must be developed to document how the Permittee carries out the required corrective measures program at each SWMU or other areas of concern. All such documents must be reviewed and approved by Illinois EPA prior to their implementation.

3.0 PHASE I OF THE CMP

Phase I of the CMP includes selection of the corrective measure to be taken and developing a basis for completing the final design of the measure. This effort should be documented in a Conceptual Design Report which describes the proposed corrective measure for each SWMU and other areas of concern and provides a conceptual design for these measures. Typically, the main criteria for Illinois EPA review is whether the proposed corrective measures are able to achieve the final corrective action objectives previously established by the Permittee and the Illinois EPA and/or provide the necessary institutional controls to prevent the migration of contaminants from the SWMU of concern. However, this would not be the case if the selected corrective measure was closing the unit as a landfill and then providing adequate post-closure care (under this scenario, the main criteria for review could be ensuring the adequacy of the final cover system and post-closure care program).

The Conceptual Design Report should contain the following sections:

1. Introduction/Purpose. This section should contain: (1) general background information regarding the project; (2) the purpose and goals of the submittal; and (3) the scope of the project.
2. Existing Site Conditions. This section should contain a summary of the investigative activities conducted for each of the units of concern. Investigation analytical results should be provided in tabular form, and maps depicting both the horizontal and vertical extent of contamination at the site should be provided.
3. Evaluation for Potential Future Migration. Based on the existing site conditions, a conceptual model of the site should be developed and presented in this section. The potential for additional future migration of contamination for each of the units of concern must then be evaluated, especially those units which have been determined to have released hazardous waste/hazardous constituents to the groundwater. It may be helpful to develop conceptual models for contaminant migration. Of special concern in this evaluation are (1) the physical properties of the contaminants (solubility, volatility, mobility, etc.); and (2) existing site conditions (types of soil present, location of contamination, hydrology, geology, etc.).
4. Identification of Options Available. This section should contain a brief discussion of the various options available to achieve the corrective measures objectives for each unit. This discussion should identify: (1) a general overview of each option available, including how the option will achieve the stated objective; (2) the advantages associated with each option; (3) the disadvantages associated with each option and (4) an estimate of the cost associated with choosing each remedial option.
5. Description of Selected Corrective Measure. This section should contain a qualitative discussion of the corrective measure chosen, along with the rationale which was used to select this measure from all those identified initially. This discussion should include documentation that the selected corrective measure will be effective.
6. Corrective Measures Objectives. In general, this section should discuss the general objectives of the proposed corrective measure to be constructed/installed, and the ability of the proposed corrective measure to achieve the established corrective action objectives. If the selected corrective measure is closure as a landfill which will require proper establishment of a final cover and proper post-closure care of the closed unit, then this section should discuss the general objectives of the proposed closure/post-closure effort.

7. Identification of Design Criteria. This section should identify what information must be available to design the selected corrective measure.
8. Review of Available Information. This section should contain an evaluation of the existing information to ensure that it is sufficient to complete the design of the selected corrective measure. If insufficient information is available, then the report should contain procedures for collecting the required additional information.
9. Procedures for Completing the Design. This section should contain a description of the procedures which will be followed to complete the design of the corrective measure. This should include as appropriate:
 - a. Identification of the references and established guidance which will be used in designing the selected corrective measure. Justification for the selection of this procedure should also be provided.
 - b. A description of the procedures which will be used to complete the design of the corrective measure.
 - c. Identification of assumptions to be used in the design, and the impact these assumptions have on the overall corrective measure;
 - d. Significant data to be used in the design effort;
 - e. Identification and discussion of the major equations to be used in the design effort (including a reference to the source of the equations);
 - f. Sample calculations to be used in the design effort;
 - g. Conceptual process/schematic diagrams;
 - h. A site plan showing a preliminary layout of the selected corrective measure;
 - i. Tables giving preliminary mass balances;
 - j. Site safety and security provisions.

This information will form the technical basis for the detailed design of the remedial measure and the preparation of construction plans/specifications.

10. Identification of Required Permits. This section should identify and describe any necessary permits associated with the selected corrective measure, as well as the procedures which will be used to obtain these permits.
11. Long-lead Procurement Considerations. This section should identify any elements/components of the selected corrective measure which will require a large amount of time to obtain/install. The following issues should also be discussed: (1) the reason why it will take a large amount of time to obtain/install the item; (2) the length of time necessary for procurement and (3) recognized sources of such items.
12. Project Management. This section should contain information regarding the procedures and personnel which will be involved in completing the design of the selected corrective measure. A schedule for completing the design should also be provided.

4.0 PHASE II OF THE CMP

Once the Illinois EPA approves the Conceptual Design Report, the facility should complete the design of the approved corrective action (Phase II of the CMP). Upon final completion of the design, a Final Design Report, consisting of final plans, specifications, construction work plan, etc., must be submitted to the Illinois EPA for review and approval.

Several documents must be submitted to the Illinois EPA as part of Phase II of the CMP. The following text describes the expected contents of the various documents which should be developed and submitted to the Illinois EPA as part of Phase II of the CMP.

1. Final Design Report and Construction Work Plan. The Final Design Report and Construction Work Plan must contain the detailed plans, specifications and drawings needed to construct the corrective measure. In addition, this document must contain (1) calculations, data etc., in support of the final design; and (2) a detailed description of the overall management strategy, construction quality assurance procedures and schedule for constructing the corrective measure. It must be noted that the approved Conceptual Design Report forms the basis for this final report. The information which should be provided in this document includes:
 - a. Introduction/Purpose. This portion of the document should: (1) provide background information regarding the project, (2) describe the purpose and goals of the project, and (3) describe the scope of the project.
 - b. Detailed Plans of the Design System, including the following:

1. Plan views;
 2. Section and supplementary views which, together with the specifications and general layouts, facilitate construction of the designed system;
 3. Dimensions and relative elevations of structures;
 4. Location and outline form of the equipment;
 5. Ground elevations; and
 6. Descriptive notations, as necessary, for clarity.
- c. Technical Specifications. Complete technical specifications for the construction of the system, including, but are not limited to, the following:
1. All construction information, not shown in the drawings, which is necessary to inform the contractor in detail as to the required quality of materials, workmanship, and fabrication of the project;
 2. The type, size, strength, and operating characteristics of the equipment;
 3. The complete requirements for all mechanical and electrical equipment, including machinery, valves, piping and jointing of pipe;
 4. Electrical apparatus, wiring and meters;
 5. Construction materials;
 6. Chemicals, when used;
 7. Miscellaneous appurtenances;
 8. Instruction for testing materials and equipment as necessary; and
 9. Availability of soil boring information.
- d. Project Management. A description of the construction management approach, including the levels of authority and responsibility, lines of communication and qualifications of key personnel who will direct corrective measures construction/installation must be provided in the work plan.

- e. Construction Quality Assurance/Quality Control. A construction quality assurance/quality control plan describing the procedures which will be followed to ensure the corrective measure is constructed/installed in accordance with the approved plans and specifications.
 - f. Schedule. The work plan must contain a schedule for completion of all major activities associated with construction/installation of the selected corrective measures. All major points of the construction/installation should be highlighted.
 - g. Waste Management Practices. This portion of the document should identify the wastes anticipated to be generated during the construction/installation of the corrective measures, and provide a description of the procedures for appropriate characterization and management of these wastes.
 - h. Required Permits. Copies of permit applications submitted to other Bureaus of the Illinois EPA for the selected corrective measure must be provided in the report. If it is determined that no permit is required for construction/installation and implementation of the corrective measures, rationale and justification must be provided to support this contention.
 - i. Cleanup Verification. The report must contain the procedures which will be followed that the approved remediation objectives have been achieved when operation of the system is completed.
2. Operation and Maintenance Plan. An Operation and Maintenance Plan must be developed and submitted as part of Phase II of the CMP. This plan should outline the procedures for performing operations, long term maintenance, and monitoring of the corrective measure.
- a. Introduction and Purpose. This portion of the document should provide a brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.
 - b. System Description. This portion of the document should provide a description of the corrective measure and significant equipment, including manufacturer's specifications. This portion of the permit should also include a narrative of how the selected system equipment is capable of complying with the final engineered design of the corrective measure.

- c. Operation and Maintenance Procedures. This portion of the document should provide a description of the normal operation and maintenance procedures for the corrective measures system, including:
 - 1. Description of tasks for operation;
 - 2. Description of tasks for maintenance;
 - 3. Description of prescribed treatment or operation conditions; and
 - 4. Schedule showing the frequency of each operation and maintenance task.
- d. Inspection Schedule. This portion of the document should provide a description of the procedures for inspection of the corrective measures system, including problems to look for during the inspection procedure, specific inspection items, and frequency of the inspections.
- e. Waste Management Practices. This portion of the document should provide a description of the wastes generated by the corrective measure, and the appropriate procedures for proper characterization/management of these wastes.
- f. Contingency Procedures. This portion of the document should provide a description of the procedures which will address the following items:
 - 1. System breakdowns and operational problems including a list of redundant and emergency backup equipment and procedures;
 - 2. Alternative procedures (i.e., stabilization) which are to be implemented in the event that the corrective measure fails. The alternative procedures must be able to prevent release or threatened releases of hazardous wastes/hazardous constituents which may endanger human health and the environment, or exceed cleanup standards.
 - 3. Notification of facility and regulatory personnel in the event of a breakdown in the corrective measures, including written notification identifying what occurred, what response action is being taken and any potential impacts on human health and the environment.

5.0 PHASE III OF THE CMP

Once the final design report is approved by the Illinois EPA, construction/installation of the approved corrective measure must commence. During this period, quarterly reports should be submitted which contain the following information:

1. Summary of activities completed during the reporting period;
2. An estimate of the percentage of the work completed;
3. Summaries of all actual or proposed changes to the approved plans and specifications or its implementation;
4. Summaries of all actual or potential problems encountered during the reporting period;
5. Proposal for correcting any problems; and
6. Projected work for the next reporting period.

Upon completion of construction/installation of the approved corrective measure, (including construction of a final cover system over a SWMU being closed as a landfill and establishment of the approved groundwater monitoring program) a Construction Completion Report must be submitted to the Illinois EPA documenting that these efforts were carried out in accordance with the Illinois EPA approved plans and specifications. This report should contain a thorough description of the efforts that went into constructing/installing the corrective measure and demonstrate that the procedures in the Illinois EPA-approved Final Design Report were followed during this effort. Such a report should be formatted in a logical and orderly manner and contain the following information:

1. An introduction discussing the background of the project and the purpose and scope of the corrective measure described in the report.
2. Identification of the plans, technical specifications and drawings which were used in constructing/installing the corrective measure. These specifications and drawings should have been approved by the Illinois EPA during Phase II.
3. Identification of any variations from the Illinois EPA approved plans, technical specifications and drawings used in construction/installing the corrective measure. Justification regarding the need to vary from the approved plans and specifications must also be provided.

4. A description of the procedures used to construct/install the corrective measure, including the procedures used for quality assurance and quality control.
5. As-built drawings, including identification of any variations from the approved plans, technical specifications and drawings.
6. A summary of all test results from the construction/installation effort, including quality assurance/quality control testing.
7. Actual test results, including quality assurance/quality control test results. These results should be located in an attachment/appendix and be well organized.
8. Identification of any test results which did not meet the specified value and a description of the action taken in response to this failure, including re-testing efforts.
9. Photographs documenting the various phases of construction.
10. A detailed discussion of how the construction/installation effort met the requirements of the approved Final Design Report.
11. A certification meeting the requirements of 35 Ill. Adm. Code 702.126 by an independent qualified, licensed professional engineer and by an authorized representative of the owner/operator.

6.0 PHASE IV OF THE CMP

Once the corrective measure has been constructed/installed, it must be operated, maintained and monitored in accordance with the approved plans and specifications (this is Phase IV of the CMP). During this period, quarterly reports must be submitted to the Illinois EPA documenting the results of these efforts (including the required post-closure efforts for SWMUs closed as landfills). These reports include the following:

1. Introduction. -- A brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.
2. System Description. -- A description of the corrective measures constructed/installed at the site, and identify significant equipment. Describe the corrective measure and identify significant equipment.

3. Monitoring Results. -- A description of the monitoring and inspection procedures to be performed on the corrective measures (including the required post-closure efforts for SWMUs closed as landfills). A summary of the monitoring results for the corrective measures, including copies of any laboratory analyses which document system effectiveness, provide a description of the monitoring procedures and inspections performed, and include a summary of the monitoring results for the corrective measure. Copies of all laboratory analytical results which document system monitoring must be provided.
4. Effectiveness Determination. -- Calculations and other relevant documentation which demonstrates the effectiveness of the selected corrective measure in remediating/stabilizing contamination to the extent anticipated by the corrective measures final design. Copies of relevant analytical data should be provided to substantiate this determination.
5. System Effectiveness Recommendation. -- Based upon the results of the effectiveness determination required under Item 4 above, recommendations on continued operation of the corrective measure must be provided. If the corrective measure is not performing in accordance with the final design, a recommendation on revisions or expansion of the system should be provided. Additionally, based upon the monitoring results, a schedule for achieving the cleanup standards would be included with each determination.

7.0 PHASE V OF THE CMP

Once all corrective measures have been completed, a report must be developed documenting all the efforts which were carried out as part of implementing the corrective measure and demonstrating, as appropriate, that the approved corrective action objectives have been achieved. If the selected corrective measure was closing the SWMU as a landfill and then providing post-closure care, this report would be submitted at the end of the post-closure care period and this report would contain information demonstrating that post-closure care of the unit had been carried out in accordance with the approved plan.

8.0 PROCEDURES WHICH SHOULD BE FOLLOWED WHEN SOIL REMOVAL IS THE SELECTED CORRECTIVE MEASURE

Sections 3 through 7 above describe the procedures which should be followed when it is necessary to design some type of physical corrective measure (e.g., a final cover system, some type of treatment system, etc.). However such detail is not necessary if

excavation/removal is selected as the remedial action for the contaminated soil encountered at the site. In general, a work plan should be developed for this effort (for Illinois EPA review and approval) which fully describes each step to be used in removing the contaminated soil from the property. This includes a description of (1) the equipment utilized in the removal effort; (2) the pattern followed in removing the soil; (3) the depth to which the soil will be removed; (4) management of the soil on-site after it is removed from the ground; (5) loading areas; (6) the ultimate destination of the soil; and (7) any other steps critical to the removal effort.

One way to conduct a soil removal effort is to collect and analyze a sufficient number of soil samples to clearly determine the horizontal and vertical extent of soil contamination prior to conducting the soil removal effort. The boundaries of soil which must be removed are defined by the Illinois EPA established cleanup objectives for the project. Soil excavation must extend to sample locations where soil test results indicate that the remediation objectives are met. Closure verification sampling is not necessary in such cases, if a registered professional engineer oversees the soil removal effort and certifies that the remediation limits extend to these boundaries.

Another way to conduct a soil removal effort is to collect and analyze a limited number of soil samples prior to the soil removal effort and to rely mainly on field observation to determine the extent of the soil removal. In such cases closure verification sampling is necessary. Soil samples must be collected for analysis from the bottom and sidewalls of the final excavation. The following sampling/analysis effort is necessary to demonstrate that the remaining soil meets the established cleanup objectives:

1. A grid system should be established over the excavation.
2. Samples should be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.
3. Samples should be collected at 6"-12" below the ground surface (bgs) along the excavation sidewalls at each grid intersection around the excavation perimeter. Samples must also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.
4. Collection/analysis of all required samples must be in accordance with the procedures set forth in the approved plan.
5. Soil samples which must be analyzed for volatile organic compounds (VOCs) should be collected using Attachment A of the Illinois EPA RCRA closure plan guidance (November 1994). In addition, such samples must be collected 6"-12" beneath the

floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

6. No random sampling may be conducted to verify achievement of cleanup objectives have been met.
7. Additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established cleanup objectives. Additional samples must be collected and analyzed in accordance with the procedures described above from areas where additional soil has been removed.

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ATTACHMENT -- E

Closure Cost Estimate
for
Hazardous Waste Storage Area

ILD07442938

LPC #0311860003

Part B Log #113R

ATTACHMENT -- E

(Closure Cost Estimate 2003)

Closure Cost for Hazardous Waste Storage Area, capacity 27,500 gallons at Detrex Corporation
(Melrose Park Facility).

Closure Cost

\$39,980

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ATTACHMENT -- F

Approved Permit Application

ILD074424938

LPC #0311860003

Part B Log 113R

SECTION	APPROVED SECTION EDITION
Part A Application	Section A, 10-9-02
Facility Plan	Section A, Rev. 0
Secondary Containment Cert.	Section A, Rev. 0
Ill Prof. Engineering Cert.	Section A, 1-23-03
Siting Exemption	Section A, Rev. 0
Notification & Mailing Lists	Section A, Rev. 0
General Description	Section B, Rev. 02-2 10/4/02
Topographical Map	Section B, Rev. 02-2 10/4/02
Facility Location	Section B, Rev. 02-2 10/4/02
Traffic Info	Section B, Rev. 02-2 10/4/02
Operating Record	Section B, Rev. 02-2 10/4/02
Maps	Section B, 11-15-02
Waste Characteristics	Section C, Rev. 03-1, 1/2/03
Process Information	Section D, Rev. 02-2, 10/4/02
Groundwater Monitoring	Section E, Rev. 02-1, 4/30/02
Procedures to Prevent Hazards	Section F, Rev. 02-2, 10/4/02
Contingency Plan	Section G, Rev. 03-1, 1/2/03
Personnel Training	Section H, Rev. 02-2, 10/4/02
Closure & Post-Closure Requir.	Section I, Rev. 02-1, 10/4/02
Other Federal Laws	Section J. Rev. 02-2, 10/4/02

LPC #0311860003
Part B Log No. 113R

Certifications

Section K, Rev. 02-2, 10/4/02

Continuing Releases

Section L, Rev. 02-1, 4/30/02

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ROD R. BLAGOJEVICH, GOVERNOR

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217/524-3300

May 19, 2003

CERTIFIED MAIL

7002 2030 0001 1879 5074

Detrex Corporation
Attn: Robert Currie
P.O. Box 5111
Southfield, MI 48086-5111

Re: 0311860003 - Cook County
Detrex Corporation
ILD074424938
Part B Log #113R
RCRA Part B Administrative Record

Dear Mr. Currie:

Enclosed is a draft renewal RCRA (Resource Conservation and Recovery Act) Hazardous Waste Management Part B permit and fact sheet. The draft permit is based on the administrative record contained in the Illinois EPA's files. The contents of the administrative record are described in Title 35 Illinois Administrative Code (Ill. Adm. Code) Section 705.144.

The draft permit is divided into two parts: A RCRA permit issued by Illinois EPA and a Hazardous Waste Management Permit issued by USEPA regarding 40 CFR 269, Subpart CC, air emission standards for tanks, surface impoundments and containers. Read both the permits carefully, failure to meet any portion of either permits could result in civil and/or criminal penalties.

Under the provisions of 35 Ill Adm. Code Section 705.141 (d), the draft permit, and administrative record must be publicly noticed and made available for public comment. The Illinois EPA must also provide an opportunity for a public hearing, on request. Copies of the draft decision (U.S. EPA's and Illinois EPA's draft permits) and fact sheet are available for review at the Melrose Park Public Library in Melrose Park, Illinois. The public comment period will close on July 3, 2003.

During the comment period, the applicant or any interested party may submit comments to the Illinois EPA on the draft RCRA Hazardous Waste Management Permit. At the close of the comment period, the Illinois EPA will prepare a response to significant comments. Comments on the Illinois EPA Permit may be submitted to Mara McGinnis, Deputy Director's Office, Illinois

Page 2

Environmental Protection Agency at 1021 N. Grand Avenue East, Post Office Box 19276,
Springfield, Illinois 62794-9276.

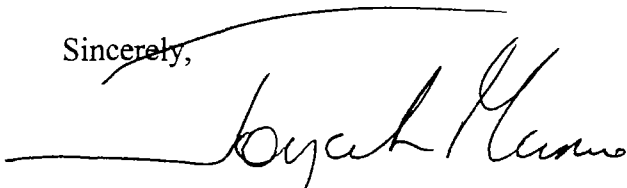
Comments on the U.S. EPA portion of the permit should be sent to the address below:

Attention: Mr. James Blough
Waste Management Branch, DW-8J
Waste, Pesticides and Toxics Division
United States Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The Illinois EPA shall issue a final permit decision after the closure of the public comment period, unless the Illinois EPA decides to reverse the tentative decision and issue a letter of intent to deny the entire permit. Any person who filed comments on the draft permit, partial draft denial, or participated in the public hearing has 35 days after the effective date to petition the Illinois Pollution Control Board to contest the final permit decision. The appeal process and limitations are addressed in 35 Ill Adm. Code Section 705.212. The appeal process and limitations for the U.S. EPA portion of the permit are addressed in 40 CFR 124.19.

If you have any questions regarding this draft permit please contact Mary Riegle of my staff at 217/524-3329. Questions on the USEPA Permit may be directed to Jim Blough, USEPA 312/886-2967.

Sincerely,



Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

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Attachments: Fact Sheet
Draft RCRA Part B
Draft USEPA Permit

cc: USEPA, Jim Blough

Fact Sheet
RCRA Hazardous Waste Management Permit
Detrex Corporation
State ID No. 031860003

This fact sheet has been prepared pursuant to the requirements of Title 35, Illinois Administrative Code, Section 705.143. The fact sheet is intended to being a brief summary of the principal facts and significant factual, legal, methodological and policy questions considered in preparing a draft RCRA permit. This renewal permit will allow Detrex Corporation (Detrex) as operator of the facility, to store and incinerate hazardous waste. Pursuant to 35 Ill. Adm. Code, 705.143(a), this fact sheet is sent to the applicant and to any other person who requests it.

I. INTRODUCTION

The permit application cited herein is the application submitted to the Illinois EPA, April 30, 2002 by Detrex. Additional revisions were received in response to Notices of Deficiencies (NOD).

<u>Notice</u>	<u>Response</u>
Verbal Request	May 20, 2002
Verbal Request	June 3, 2002
Verbal Request	June 17, 2002
Verbal Request	October 15, 2002
Verbal Request	November 13, 2002
August 21, 2002	October 9, 2002
December 30, 2002	January 27, 2003

The draft permit for the Detrex facility contains all of the standard conditions required by 35 Ill. Adm. Code, Parts 702, 703 and 724; and the applicable conditions of 35 Ill. Adm. Code, Part 724 for the storage of hazardous waste in containers. The facility is an existing facility that has been operating since 1974.

II. DESCRIPTION OF FACILITY

A. General

Detrex is located in Melrose Park, Illinois. The facility is designed to store and transfer hazardous and non-hazardous spent solvent wastes. These wastes may be either solids, liquids or sludges, and received in containers. The waste are halogenated organic hazardous wastes under 35 Ill. Adm. Code 721, classified as F001 or F002 and the corresponding U codes for these materials. The wastes may also be dully classified as D-series wastes with respect to Toxicity Characteristic Leaching Procedure parameters. This is a draft renewal RCRA Part B Permit for an

existing facility. Detrex also accepts and transfers non-hazardous waste under Permit No. 1980-044-OP. Products are also stored on-site.

Spent solvent wastes are collected from industries such as: the metal working industries that clean oil and grease from machined and stamped parts, rubber molding operations where defective parts are removed from metal inserts, the electronic industry where circuit boards and other components are cleaned and defluxed, industries that spray paint on an assembly line basis where hangers and conveyor components are cleaned with solvents on-line, and other similar type industries.

The hazardous waste operation at the facility in Melrose Park, Illinois consists of a container storage area used for the storage of drummed solvent wastes prior to the transfer of these wastes to an off-site Detrex solvent reclamation (recycling) facility, or to an off-site permitted treatment/disposal facility.

B. Site Description

The facility is located in the Cook County, Illinois. The address of the facility is:

Detrex Corporation
2537 LeMoyne Ave
Melrose Park, Illinois 60160

III. Hazardous Waste Management Activities

1. Container Storage

The maximum volume of hazardous waste to be stored in the hazardous waste storage area shall be 13,200 gallons, corresponding to a maximum of 240-55 gallon drums.

Permit Conditions in Section I of the permit are specific to container storage and implement the regulatory requirements of 35 Ill. Adm. Code 724, Subpart I

Standard Permit Conditions

Standard permit conditions 1 through 62 are regulatory requirements of 35 Ill. Adm. Code Parts 702, 703, and 724. These conditions are of a general nature and applicable to all hazardous waste management facilities regulated pursuant to an Illinois EPA RCRA permit. These conditions include the effective dates of the permit, permit actions, severability, permit expiration, monitoring and retention of records, transfer of permits, and compliance schedules.

IV. PROCEDURES FOR REACHING A FINAL DECISION

Pursuant to 35 IAC 705.162(a)(2), the public is given forty-five (45) days to review the application and comment on the Draft Permit conditions prior to Illinois EPA taking any final permitting action on the application for this RCRA Hazardous Waste Management Permit. The comment period will begin on the date of first publication of the public notice in a major local newspaper of general circulation. The comment period will end thirty (30) days after the date of any public hearing. When the Illinois EPA makes its final Permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final Permit decision. The Permit will become effective thirty-five (35) days after service of notice of the decision or at a later date if stated in the Permit.

In addition, copies of the application draft permit and fact sheet will be available for review at the Melrose Park Public Library, Melrose Park, Illinois.

Any interested person may submit written comments on the draft permit, at the following address:

Illinois Environmental Protection Agency
Government and Community Affairs Section, Director's Office
Attn: RCRA Public Notice Clerk
Post Office Box 19276
Springfield, Illinois 62794-9276

The administrative record is open for public inspection at the Illinois EPA Springfield headquarters from 8:30 a.m. to 5:00 p.m., Monday through Friday. The administrative record contains the Permit application, Fact Sheet, and other supporting documents and correspondence submitted to the Illinois EPA. Inspections of the administrative record must be submitted in advance by contacting the Public Notice Clerk at the above address.

For further information, please contact Mara McGinnis, Director's Office, Illinois Environmental Protection Agency at 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 or telephone at 217/785-1427.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

Detrex Corporation
Attn: Mr. Robert Currie
P.O. Box 5111
Southfield, MI 48086-5111

Illinois EPA #0311860003 -- Cook County
USEPA ILD074424938
Detrex Corporation, Melrose Park Facility
RCRA Permit No. 113R
RCRA -- Part B Administrative Record

Issue Date:
Effective Date:
Expiration Date:

A draft RCRA Part B renewal Permit is hereby proposed pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) Parts 702, 703, 705, and 720 through 729 to the Detrex Corporation Melrose Park facility to operate a waste management facility involved in the storage of hazardous waste. Detrex Corporation is located at 2537 LeMoyné Avenue, Melrose Park, Illinois.

This draft permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which is issued. This Permit contains 90 pages including Attachments A through F.

If you have any questions regarding this Part B Permit, please contact Mary Riegle at 217/524-3329.

Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

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HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

DETREX CORPORATION

Melrose Park, Illinois

LPC No. 0311860003 -- Cook County

ILD074424938

Permit Log No. 113R

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LIST OF ATTACHMENTS

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SECTION I GENERAL PROVISIONS

I. General Description

Detrex is located in Melrose Park, Illinois. The facility is designed to store and transfer hazardous and non-hazardous spent solvent wastes. These wastes may be either solids, liquids or sludges, and received in containers. The waste are halogenated organic hazardous wastes under 35 Ill. Adm. Code 721, classified as F001 or F002 and the corresponding U codes for these materials. The wastes may also be dully classified as D-series wastes with respect to Toxicity Characteristic Leaching Procedure parameters. This is a draft renewal RCRA Part B Permit for an existing facility. Detrex also accepts and transfers non-hazardous waste under Permit No. 1980-044-OP. Products are also stored on-site.

Spent solvent wastes are collected from industries such as: the metal working industries that clean oil and grease from machined and stamped parts, rubber molding operations where defective parts are removed from metal inserts, the electronic industry where circuit boards and other components are cleaned and defluxed, industries that spray paint on an assembly line basis where hangers and conveyor components are cleaned with solvents on-line, and other similar type industries.

The hazardous waste operation at the facility in Melrose Park, Illinois consists of a container storage area used for the storage of drummed solvent wastes prior to the transfer of these wastes to an off-site Detrex solvent reclamation (recycling) facility, or to an off-site permitted treatment/disposal facility.

II. Specific Hazardous Waste Management Units

The facility has one hazardous waste container storage area. The maximum volume of hazardous waste to be stored in this area shall be 13,200 gallons, corresponding to a maximum of 240 55-gallons drums.

III. Approved Application

The facility received its initial permit on September 30, 1992. This Permit expired on November 4, 2002. An application for renewal was received on May 1, 2002. This draft is based on the application for renewal.

SECTION II CONTAINERS

A. SUMMARY

Containers of hazardous waste shall be stored in the hazardous waste storage area. The hazardous waste storage area is located indoors, in the northern half of the site. The portion of the building that makes up the hazardous waste storage area is defined by its diked concrete base. The concrete is coated with a chemical resistant sealant. The hazardous waste storage area shall have a containment capacity of at least 11,269 gallons. This containment capacity is adequate to contain at least 10 percent of the volume of the hazardous waste, non-hazardous waste and product containers to be stored within the secondary containment system. The maximum volume of hazardous waste to be stored in the hazardous waste storage area shall be 13,200 gallons, corresponding to a maximum of 240 55-gallon drums. A maximum of 300 55-gallon empty containers and 300 55-gallon containers of product and/or non-hazardous waste (stacked 2 high) may also be stored within the secondary containment area (stacked three-high). The only waste which may be stored in the hazardous waste storage area are hazardous wastes as identified in Table C-1 of the approved permit application.

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall only be conducted in the approved storage area shown as the hazardous waste container storage area on Attachment D-1 of the approved permit application.
2. The Permittee may only store the hazardous wastes identified in Table C-1 of the approved permit application in the container storage area. A maximum of 27,500 gallons of waste may be stored in the container storage area. The hazardous waste codes for those wastes are listed in Attachment A to this permit.
3. The Permittee is prohibited from storing hazardous waste in the secondary containment area that is not identified in Condition B. 2. above.
4. Prior to the shipment of any drummed waste from a new customer, a preliminary assessment of the waste shall be conducted at the generator's facility. This preliminary assessment shall include analysis of a waste sample for specific gravity, pH ignitability and a visual inspection of a full depth sample, using a coliwasa, to determine color and phases. A representative sample obtained from each drum of waste shall be analyzed for specific gravity, pH ignitability, flammability and visual inspection in accordance

with the approved waste analysis plan. The results of all laboratory analyses shall be recorded in the facility operating record. For each analysis, the operating record shall also indicate who obtained the sample, the date of the sampling, and the sampling procedures used.

5. The Permittee shall only accept wastes with a specific gravity greater than or equal to 0.80 and less than or equal to 1.68.
6. Prior to storing containers of waste in the hazardous waste container storage area, all containers shall be visually inspected and analyzed for specific gravity and the results compared to the one recorded during the preliminary assessment. In addition, all containers listed on a line item of a manifest shall be composited and analyzed for flammability (ASTM Method D4982-89). If the composite sample is flammable or even slightly flammable, all the drums within that composite shall be analyzed for flammability. Any drum that is flammable or even slightly flammable shall be analyzed for ignitability (ASTM Method D3278-89) and the results compared to the one recorded during the preliminary assessment. If a discrepancy is found, the waste shall not be accepted at the facility prior to reanalysis. If the specific gravity, ignitability, and visual inspection is consistent with previous analysis, the containers may be stored at the facility.
7. Analysis for organics shall include all of the hazardous constituents for the volatile organics identified in Table C-1 of the approved permit application and Attachment A to this permit.
8. Samples which will be tested for volatile organics shall not be composited because of the volatilization which may result from any compositing method.
9. Every five (5) years a sample from each waste stream from each customer shall be sent off-site to the laboratory for analysis of specific gravity, organics, ignitability, and total metals, unless the process generating the waste changes prior to that time. If the process generating the waste changes, the waste shall not be accepted at the facility prior to reanalysis.
 - a. For existing customers on the effective date of this permit, the first such analysis shall be conducted as follows:
 1. If the generator or the Permittee has conducted such an analysis within the last two (2) years prior to the effective date of this permit, then the next analysis shall be conducted not later than five (5) years from the date of such analysis.

2. If the generator or the Permittee has not conducted such an analysis as set forth above, and the Permittee is storing the waste stream from the generator on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the effective date of this permit.
 3. If the generator or the Permittee has not conducted such an analysis as set forth in Condition I.B.9.a.1 above and the Permittee is not storing the waste stream from the customer on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the date of receipt of the first delivery of the waste stream from the generator following the effective date of this permit.
- b. For new customers obtained after the effective date of this permit, such analysis shall be conducted within five (5) years after the preliminary assessment or within five (5) years of the analysis conducted by the generator, whichever is earlier.
10. Analysis for ignitability shall be conducted in accordance with ASTM D-93 or ASTM D-3228 (35 IAC Section 721.121 (a)(1)). Analysis for flammability shall be conducted in accordance with ASTM D4982-89.
 11. A coliwasa sampler shall be used to obtain a representative sample from each drum.
 12. A maximum of 300 55-gallon product and empty containers may be maintained within the secondary containment system. The containers shall only contain the hazardous constituents permitted for storage in the hazardous waste storage area and shall not contain materials that are incompatible with any waste or other materials stored nearby in other containers unless separated from the other material and protected from them by means of a dike, berm, wall, or other devices. In addition, containers of ignitable and combustible (NFPA definition) product shall not be stored in the secondary containment area.
 13. The frequency of duplicate, blank, and spiked samples shall be consistent with the latest edition of SW-846.
 14. Ignitable, reactive and/or corrosive wastes shall not be accepted.
 15. A maximum combination of 300 55-gallon drums of product and/or non-hazardous waste may be stored in the hazardous waste container storage area in accordance with Detrex's state operating Permit. The drums must be stacked 2-high.

16. Incoming waste must be shipped off-site or placed in permitted storage within 24 hours of the shipment arriving on-site.
17. The waste in containers may not be consolidated or combined.
18. An aisle space of 30 inches must be maintained in the container storage area.
19. Non-bulk containers may be stacked to a maximum of 2-high.

C. CONDITION OF CONTAINERS --

1. If a container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste or product from this container to a container that is in good condition or manage the waste in accordance with the approved permit application.
2. Any transfer of waste which was required to comply with I(C)(1), shall be recorded in the facility's operating record.
3. Packaging of all wastes accepted for storage in the container storage area shall meet the requirements of 49 CFR 172, 178 and 179 and all applicable D.O.T. and N.F.P.A. regulations. All containers shall be marked and placarded in accordance with 49 CFR 172.
4. The contents of each container shall be clearly identified on the side of the container in accordance with 49 CFR 172 prior to being placed in the container storage area.

D. COMPATIBILITY OF WASTE WITH CONTAINERS -- The Permittee must use a container made of or lined with material which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

E. MANAGEMENT OF CONTAINERS -- The Permittee shall comply with the following management practices:

1. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must always be closed during storage, except when it is necessary to add or remove waste.

2. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

F. INSPECTION

The Permittee shall inspect the container area daily, in accordance with the inspection schedule, specified in Attachment F-2, to detect leaks and deterioration of containers. The containment system shall be inspected weekly and repaired or recoated as soon as possible, if the inspection determines the concrete sealant has deteriorated. The Permittee shall perform a complete inspection of the concrete sealant yearly and perform annual maintenance to insure the integrity of the lining.

- G. CONTAINMENT -- The Permittee shall construct, operate, and maintain the containment system according to the design plans and operating specifications contained in the approved permit application.

- H. CLOSURE -- At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the containment system. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify Illinois EPA's DLPC in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the storage area has been properly decontaminated. This plan must be approved by Illinois EPA's DLPC in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from Illinois EPA will approve and establish:
 - a. The sampling and decontamination plan;
 - b. What contaminants must be analyzed for;
 - c. Analytical requirements (SW-846 Methods should be utilized); and
 - d. The level at which decontamination or removal is considered complete.

2. All sweepings, wash water and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721.
3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.
4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
6. Within sixty (60) days after closure of the container storage area is complete, the Permittee shall submit certification to Illinois EPA that the unit has been closed in accordance with the approved closure plan.

The closure certification forms in Attachment B to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until Illinois EPA approves the closure certification for the unit. Illinois EPA's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
 - b. A description of the method of waste handling and transport.
 - c. Copies of the waste manifests.
 - d. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.
 - e. A chronological summary of closure activities and the cost involved.
 - f. Tests performed, methods and results.
 - g. Color photographs of closure activities which document conditions before, during and after closure.
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
9. If Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, Illinois EPA reserves the right to

amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.

10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials in the same container.

Incompatible wastes or materials must not be placed in the same container to prevent reactions which:

- a. Generate extreme heat or pressure, fire or explosions, or violent reactions
- b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
- c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions
- d. Damage the structural integrity of the device or facility
- e. Through other like means, threaten human health or the environment.

The basic methods for preventing such reactions are to:

- a. Treat one or both of the incompatible wastes/materials to render them compatible prior to placing them in the container
 - b. Physically separate the incompatible wastes/materials in the containers so that it is not possible for the incompatible wastes/materials to come in contact with each other.
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

3. The Permittee shall not store containers holding a hazardous waste or product that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments unless separated from the other material or protected from them by means of a dike, berm, wall, or other devices.

J. CONTINGENCY PLAN - ADDITIONAL SPECIAL CONDITIONS

1. The Permittee shall implement the facility contingency plan contained in the approved permit application any time there is (1) a release of hazardous waste or hazardous constituents which could threaten human health or the environment, (2) a release of hazardous waste or hazardous constituents which is equal to or greater than the Reportable Quantity (RQ), (3) a fire or explosion which involves hazardous waste or which occurs in areas where hazardous wastes are stored, or (4) a release of hazardous waste or hazardous waste constituents which, based on the air dispersion modeling results contained in the contingency plan, would be expected to result in exposure above an OSHA short term exposure limit to unprotected persons. (This would not apply to responding personnel who employ the proper personal protective equipment (PPE)).
2. The Permittee shall contact the local emergency response entities as soon as possible after implementation of the contingency plan:
 - a. The entities which must be notified include:
 1. Melrose Park Fire Department
 2. Melrose Park Police Department
 3. Local ESDA Coordinator
 4. Illinois Emergency Management Agency
 - b. The information which must be initially relayed to each entity includes:
 1. The type of emergency (release, fire or explosion);
 2. The type of wastes or product involved in the emergency and the approximate quantity involved;
 3. An initial assessment of the conditions at the site;

- c. If the Permittee is able to properly respond to the emergency without any aid from the entities identified in Condition 2.a above, the Permittee shall notify each of these entities that the emergency situation no longer exists once all required emergency response and cleanup activities have been completed. This condition does not preclude the need to initially notify the entities in 2.a above.
3. The Permittee shall review all components of the contingency plan with the local emergency response entities at least once every twelve months. Copies of the meeting notes and list of attendees shall be placed in the facility's operating record and be available to Illinois EPA for review upon verbal or written request.

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SECTION III
STANDARD CONDITIONS
GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by Illinois EPA. (35 IAC 702.142 and 703.125)
7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see

35 IAC 703.181-703.209) and through no fault of the Permittee Illinois EPA has not issued a new permit as set forth in 35 IAC 702.125.

8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to Illinois EPA, within a reasonable time, any relevant information which Illinois EPA may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to Illinois EPA, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of Illinois EPA, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

13. MONITORING AND RECORDS. (35 IAC 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of Illinois EPA at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical technique(s) or method(s) used; and
 - vi. The result(s) of such analyses. (35 IAC 702.150)

14. REPORTING PLANNED CHANGES. The permittee shall give notice to Illinois EPA as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:

- a. The permittee has submitted to Illinois EPA by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- b.
 - 1. Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
 - 2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from Illinois EPA of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))

15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to Illinois EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:

- i. The permittee has submitted to Illinois EPA by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- ii. Either:
 - a. Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - b. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from Illinois EPA of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 702.152(b) and 703.247)

16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to Illinois EPA. Illinois EPA may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))
17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))
18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))
19. TWENTY-FOUR HOUR REPORTING.
 - a. The Permittee shall report to Illinois EPA any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
 - b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;

- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.
- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. Illinois EPA may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))
20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to Illinois EPA, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
- a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to Illinois EPA a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
 - b. Unmanifested waste report: The permittee must submit to Illinois EPA within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)

- c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)
23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:
- Illinois Environmental Protection Agency
Division of Land Pollution Control #24
Planning and Reporting Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to Illinois EPA shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)
25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.
26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
- a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
 - b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
 - c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
 - d. Closure plan as required by 35 IAC 724.212(a) and this permit.
 - e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
 - f. Operating record as required by 35 IAC 724.173 and this permit.
 - g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.

27. WASTE MINIMIZATION. The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

GENERAL FACILITY STANDARDS

28. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify Illinois EPA in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. NOTICE OF WASTE FROM OFF-SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
30. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. SECURITY. The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. GENERAL REQUIREMENTS. The Permittee shall not store ignitable, reactive, or incompatible wastes at the facility.

PREPAREDNESS AND PREVENTION

35. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)
36. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.
37. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

CONTINGENCY PLAN

41. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to Illinois EPA as required by 35 IAC 724.156(j).

42. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 IAC 724.153.
43. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
44. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

45. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172 and 724.176.
46. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
47. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to Illinois EPA prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

CLOSURE

48. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
49. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
50. NOTIFICATION OF CLOSURE. The Permittee shall notify Illinois EPA at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
51. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)

52. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
53. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to Illinois EPA in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
54. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.
 - b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
 - c. Kept on record at the facility and updated. (35 IAC 724.242)
55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by Illinois EPA pursuant to 35 IAC 724.243.
56. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 IAC 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

58. DISPOSAL PROHIBITION. Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with non-restricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and

includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.

59. DILUTION PROHIBITION. The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).

60. WASTE ANALYSIS.

1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

61. STORAGE RESTRICTIONS

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

62. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to

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the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

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SECTION IV CORRECTIVE ACTION

A. INTRODUCTION

In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents from any solid waste management unit (SWMU) at its facility in Melrose Park, Illinois. This shall be accomplished by:

1. Completing a RCRA Facility Investigation (RFI) to determine whether releases of hazardous wastes and hazardous constituents have occurred from any solid waste management unit (SWMU) at its facility, and if so, the nature and extent of the release(s).
2. Based upon the results of the RFI, developing and implementing a Corrective Measures Program, which describes the necessary corrective measures, which will be taken. The required corrective measures shall be those measures necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any of the SWMUs determined to pose an environmental threat by the RFI required under the terms and conditions of this permit.

B. CONDUCTING THE RCRA FACILITY INVESTIGATION

The Permittee must conduct a RCRA Facility Investigation (RFI) to determine the nature and extent of releases of hazardous wastes and hazardous constituents from certain SWMUs at the subject facility.

1. An RFI Phase I workplan for this facility was approved by Illinois EPA on June 17, 1993, modifications to this plan were approved by Illinois EPA on September 10, 1993. The solid waste management units to be investigated were:
 - a. Waste Handling Area (SWMU #1)
 - b. Fuel Spill Area (SWMU #2)
 - c. Tank Car Unloading Area (SWMU #3)

d. Potential UST Area (SWMU #4)

A drawing showing the location of these units within the facility is provided in Attachment D-1.

2. A report documenting the results of the Phase I RFI was approved by Illinois EPA on June 15, 1994. The results of the Phase I RFI indicated that additional investigation was necessary to fully characterize the extent of the releases of the 4 SWMUs of concern.
3. An RFI Phase II workplan for the 4 SWMUs of concern was approved by Illinois EPA on January 27, 1995.
4. On July 18, 1996, Illinois EPA approved a report documenting the results of the initial stage of the RFI Phase II. Additional RFI Phase II investigative efforts were also approved.
5. On January 22, 1997, Illinois EPA approved a Scope of Work for Stage II of Phase II RFI.
6. Detrex has submitted reports entitled "Phase II Stage II Investigative Summary and Tier 1 Screening Evaluation" and "Tier 2 TACO Analysis for Detrex RCRA Facility" which are currently under review by Illinois EPA.
7. The Agency's DLPC will review the data contained in the reports identified in Condition B.6 above and notify the Permittee in writing of the results.
 - a. If the Agency determines that there is a potential that groundwater has been impacted by a release of hazardous wastes or hazardous constituents from any SWMU evaluated during the Phase I or Phase II investigation, then the Permittee must conduct Phase III of the RFI for such SWMUs. The purpose of the Phase III investigation of the RFI will be to (1) determine if groundwater has been impacted at such SWMUs and (2) the extent of any detected release. The requirements associated with a Phase III Investigation are contained in Attachment D-2 to this permit.
 - b. If the Agency's DLPC determines that a RFI Phase III investigation is not required, based on data obtained from the RFI Phase II investigation, the Agency reserves the right to require that corrective measures be conducted for the

SWMU(s) of concern to address releases identified through the Phase I and Phase II investigations.

- c. The Agency's response to the Phase II report will:
 - i. Identify those SWMUs for which Phase III of the RFI must be conducted; and,
 - ii. Identify those SWMUs and associated environmental media for which corrective action is required, although no Phase III investigation is required.
 - d. Agency action on the final RFI Phase II report will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
8. Within 90 days of notification of the need for a Phase III investigation, the Permittee shall submit a plan for conducting Phase III of the RFI. The Scope of Work which should be followed in developing this work plan is provided in Attachment D-2. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase III Workplan.
- a. Within 60 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval.
 - b. Within 60 days of the Agency's DLPC approval of the RFI Phase III Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established within the Workplan.
 - c. Agency action on the Phase III workplan will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
9. The Permittee must submit a report documenting the efforts carried out in accordance with the approved RFI Phase III Workplan in accordance with the schedule set forth in that workplan.
10. Following submittal of the RFI Phase III report, the Agency's DLPC will review the data contained in the report and notify the Permittee in writing of the results.

- a. If the Agency determines that there has been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater, then the Permittee must perform corrective measures, as necessary, to protect human health and the environment. Additional corrective measures will also be required to address the source of the groundwater contamination of the groundwater.
- b. If the Agency determines that there (1) has not been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater and (2) is no potential for releases of hazardous waste or hazardous constituents from a SWMU to the groundwater, then no corrective measures will be required at that SWMU relating to groundwater. However, corrective measures may be necessary to address the waste and/or contaminated soil present at the SWMU.
- c. If the Agency determines that (1) there has not been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater (2) but there is a potential for future releases of hazardous waste or hazardous constituents from a SWMU to the groundwater, then the Agency may require a longer term groundwater monitoring program at any SWMU where substantial soil contamination exists (as determined by the Agency), or at any SWMU which would meet the definition of a land disposal unit. This additional monitoring need for this is dependent on the corrective action taken in response to the waste and/or contaminated soil present at the SWMU.
- d. The Agency's response to the Phase III report will:
 - i. Identify those SWMUs investigated as part of Phase III of the RFI from which there has been a release of hazardous waste or hazardous constituents to groundwater that requires corrective measures;
 - ii. Identify those SWMUs investigated as part of Phase III of the RFI for which no corrective measures is required for groundwater at this time;
 - iii. Identify those land-based SWMUs investigated as part of the Phase III RFI for which a longer term groundwater monitoring program must be established as a corrective measure. "Land-based SWMUs" are SWMUs where waste, contaminated soil and/or contaminated groundwater are allowed to remain in-place.
- e. Agency action on the Phase III Workplan will be subject to the appeal provisions of Sections 39(a) of the Illinois Environmental Protection Act.

C. CORRECTIVE MEASURE REQUIREMENTS

1. If it is determined that corrective measures must be taken in response to any SWMU investigated during the RFI, then the Permittee shall implement a Corrective Measures Program (CMP) for such SWMUs. The corrective measures implemented by the Permittee must be sufficient to ensure the requirements of 35 Ill. Adm. Code 302, 620, 724 and 742 are met. The requirements for implementing a CMP are set forth in Attachment D-3.
 - a. A Phase I CMP report, or its equivalent, must be submitted to Illinois EPA within ninety (90) days of written notification of the need for implementation of a Corrective Measures Program.
 - b. Subsequent plans and reports must be submitted to Illinois EPA for review and approval in accordance with an approved schedule.
 - c. Phases must be combined and/or skipped, depending on the actual corrective measure selected. The overall CMP implemented at a given SWMU must: (1) be logical in nature; (2) meet the requirements set forth in Attachment !VAR!; and (3) allow for Illinois EPA oversight and approval throughout the entire process.
2. Illinois EPA action on all corrective measure program submittals shall be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.

D. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such a cost estimate will be based upon the cost of contamination investigations and assessments for the SWMU(s), and design, construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) to meet the requirements of 35 IAC 724.201 and this permit. This cost estimate must be submitted to the Agency's DLPC with each RFI or CMP workplan.
2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition the words

"completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the Agency's approval of the initial or revised cost estimates required under Condition D.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that acceptable under 35 IAC 724.246 at its discretion.

E. FUTURE RELEASES FROM SWMUs

There exists a potential that a release may occur in the future from SWMUs identified in the RFA which did not require any corrective action at the time that the RFA or RFI was completed. If the Permittee discovers that a release has occurred from such a SWMU in the future, then the Agency must be notified of this release within thirty (30) days after its discovery. Upon the Agency's written request, the Permittee shall implement a corrective action program for that SWMU in accordance with the procedures set forth in Subsections B and C above, beginning on the date of notification, rather than on the effective date of the permit.

F. NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY- IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60) calendar days after discovery. The notification shall provide the following information, as available:
 - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
 - b. The type and past and present function of the unit;
 - c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);
 - d. The period during which the unit was operated;

- e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and
 - f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit.
2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU, the Agency's DLPC may request in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit.
 3. Within 90 calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall submit a SWMU Assessment Plan consistent with the requirements of Subsection B above. This SWMU Assessment plan must also propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the newly-identified SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.
 4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with conditions or disapprove the Plan in writing. If the plan is approved, the Permittee shall begin to implement the Plan within forty-five (45) calendar days of receiving such written notification. If the Plan is disapproved, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies specify a due date for submittal of a revised plan.
 5. The Permittee shall submit a report documenting the results of the approved SWMU Assessment Plan to the Agency's DLPC in accordance with the schedule in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan.
 6. The Permittee must implement a Corrective Measures Program, as necessary, to properly address any contamination encountered during the assessment. This program

must be carried out in general accordance with the procedures set forth in Subsection C above.

G. INTERIM MEASURES

At any time during the RFI, the Permittee may initiate additional interim measures for the purpose of preventing continuing releases and/or mitigating the results of releases and/or mitigating the migration of hazardous wastes or hazardous constituents. It shall not be necessary to conduct all phases of the RFI investigation prior to implementing an interim measure if the Agency's DLPC and the Permittee agree that a problem can be corrected, or a release cleaned up, without additional study and/or without a formal CMS.

1. Prior to implementing any interim measures beyond those specified above, the Permittee must submit detailed information regarding the proposed interim measure to the Agency's DLPC for approval. This information shall include, at a minimum:
 - a. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long-term solution at the facility;
 - b. Design, construction, and maintenance requirements;
 - c. Schedules for design and construction; and
 - d. Schedules for progress reports.
2. If the Agency's DLPC determines that a release cannot be addressed without additional study and/or a formal CMS, then the Agency's DLPC will notify the Permittee that these must be performed. Any proposal made under this provision or any other activity resulting from such proposal, including the invocation of dispute resolution, shall not affect the schedule for implementation of the RFI or of any other portion of the permit.
3. If the Agency determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

SECTION V
REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section I: CONTAINER STORAGE		
H.1.	Notify Illinois EPA of intent to close container storage area.	At least 180 days prior to commencement of closure.
H.1.	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
H.4.	Submit application for modification of permit and closure and post-closure care plan.	No later than 60 days after determination that container storage area cannot be clean closed.
H.5.	Update financial assurance.	No later than 30 days after permit modification is effective.
H.6.	Submit certification for closure of container storage area.	No later than 60 days after closure of container storage area is complete.

Section II: STANDARD CONDITIONS

6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Illinois EPA and copies of records required to be kept by this permit.	Reasonable time.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
14	Notify Illinois EPA of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Illinois EPA of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Illinois EPA any non-compliance which may endanger health or environment.	
	telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
28	Notify Illinois EPA in writing of expected receipt of hazardous waste from foreign source.	At least 4 weeks prior to receipt of waste.
41	Implementation of Contingency Plan.	
	Notify appropriate state and local agencies with designated response roles.	As needed.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
	Notify appropriate local officials.	Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable.
	Notify Illinois EPA (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion which could threaten human health or the environment, outside the facility.	Immediately after determination made.
	Notify Illinois EPA and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h).	Prior to resuming operation in affected areas.
	Report to Illinois EPA details regarding incident which required implementation of contingency plan.	Within 15 days after event.
47	Submit annual report required by 35 IAC 724.175.	March 1 of each year.
49	Application for permit modification amending closure plan.	
50	Notify Illinois EPA that expecting to close.	At least 180 days prior to beginning closure.
54(a)	Adjust closure cost estimate for inflation.	Within 30 days after anniversary date.
54(b)	Revision of closure cost estimate.	As needed.
55	Change in financial assurance mechanism for closure.	

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
56	Change in coverage for sudden and non-sudden accidental occurrences.	
57	Notify Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding.
Section III: CORRECTIVE ACTIONS		
B	RCRA Facility Investigation (RFI) Phase I Workplan	Within 90 days after the effective date of this permit.

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SECTION VI
SPECIAL CONDITIONS

1. All hazardous and non-hazardous special wastes generated by this facility and transported off-site for recycling, treatment or disposal must be transported in accordance with the uniform permit or non-hazardous special waste hauling permit and Illinois manifest system, the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809.
2. Special wastes received at the site for storage/transfer shall be transported to the facility utilizing Illinois manifest system.
3. All loading/unloading of special wastes shall be accomplished over spill containment devices which are constructed of non earthen materials and have been coated with a compatible impermeable coating and has been sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation.
4. The permittee shall perform a complete inspection of the surface coating or lining yearly and perform annual maintenance to insure the integrity of the coating.
5. It shall not be an act of non-compliance if the coating or lining of the container storage area secondary containment system has been installed properly but does not live up to the manufacture's printed performance standards and/or if the coating or lining fails due to excessive wear or chemical breakdown. The Permittee shall notify Illinois EPA within thirty (30) days of becoming aware of the failure. The facility shall request modification of its permit to install a new coating within 180 days.
6. The Permittee shall inspect the areas where tank trucks are unloading after each use. Any release of waste observed during these inspections must be responded to immediately. Such response shall include containing and collecting the released material and removing all contaminated material.
7. The Permittee shall cover the manhole located in the driveway with a polypropylene cover before loading/unloading of special waste.

SECTION VII
AIR EMISSION STANDARDS FOR CONTAINERS

- A. Whenever hazardous waste is in a container using Container Level 1 or 2 controls, the permittee shall install all covers and closure devices for the container and secure and maintain each closure device in closed position except:
1. Opening of a closure device or cover for a container is allowed for the purposes of adding/removing hazardous waste or material as follows:
 - a. In the case where the container is filled to the intended final level in one continuous operation, the permittee shall promptly secure the closure devices in the closed position and install the covers upon conclusion of the filling operation.
 - b. In the case where discrete quantities or batches of material intermittently are added to the container over a period of time, the permittee shall promptly secure the closure devices in the closed position and install covers upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
 - c. An empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time.
 - d. In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 35 Ill. Adm. Code 721.107(b), the permittee shall promptly secure the closure devices in the closed position and install covers upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
 2. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste.

3. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications.
 4. Opening of a safety device is allowed at any time conditions require doing so to avoid an unsafe condition.
- B. The permittee shall inspect the containers and their covers and closure devices as follows:
1. In the case when a hazardous waste already is in the container at the time the permittee first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, the permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility.
 2. In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the permittee shall visually inspect the container and its cover and closure device initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.
 3. When a defect is detected for the container, cover, or closure devices, the permittee shall make first efforts at repair of the defect no later than 24 hours after detection and repair must be completed as soon as possible but no later than five calendar days after detection. If repair cannot be completed within five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage hazardous waste until the defect is repaired.

ATTACHMENT A

WASTE LISTS AND HAZARDOUS WASTE
IDENTIFICATION NUMBERS

ILD074424938

LPC #0311860003

Part B Log #113

ATTACHMENT A

All wastes accepted at the Facility are halogenated organic hazardous wastes under 35 Ill. Adm. Code 721 classified as F001 or F002 and the corresponding U codes for those materials. The wastes may also be dually classified as D-series wastes with respect to TCLP parameters.

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE

F001

The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane and trichlorotrifluoroethane; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F002

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, and 1,1,2-trichloro-1,2,2-trifluoroethane; all spent solvent mixtures and blends containing before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

U080

dichloromethane

U121

trichloromonofluoromethane

U210

tetrachloroethylene

U226

1,1,1-trichloroethane

U228

trichloroethene

D039

tetrachloroethylene

D040

trichloroethylene

ATTACHMENT A

The waste codes listed below represent potential underlying constituents and are not accepted without primary waste codes.

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE
BASED ON TOXICITY
CHARACTERISTICS

D004	Arsenic
D005	Barium
D018	Benzene
D006	Cadmium
D019	Carbon Tetrachloride
D021	Chlorobenzene
D007	Chromium
D027	1,4-Dichlorobenzene
D028	1,2-Dichloroethane
D029	1,1-Dichloroethylene
D030	2,4-Dinitrotoluene
D034	Hexachloroethane
D008	Lead
D009	Mercury
D035	Methyl ethyl ketone
D010	Selenium
D011	Silver
D038	Pyridine

ATTACHMENT B

CLOSURE CERTIFICATION FORMS

ILD074424938

LPC #0311860003

Part B Log #113R

ATTACHMENT B

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registration Number

Date

ATTACHMENT C
INSPECTION SCHEDULE

ILD074424938

LPC #0311860003

Part B Log #113R

TABLE I: INSPECTION SCHEDULE
FOR HAZARDOUS WASTE STORAGE AREA

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Check container placement, stacking, aisle space and segregation	Daily	Visual
2. Check containers for adequate seals, open lids, and loose bungs	Daily	Visual
3. Check container labels	Daily	Visual
4. Check containers for corrosion, leaks, deformation	Daily	Visual
5. Check pallets for damage	Daily	Visual
6. Check the concrete floor for cracks, deterioration, wet spots	Weekly	Visual
7. Check the concrete ramps and curbs for settlement, cracks, wet spots	Weekly	Visual
8. Check the containment system for spills, leaks, stains	Weekly	Visual
9. Check the locks on gates and doors	Daily	Visual/Physical

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
10. Check the warning signs	Weekly	Visual
11. Check the loading/ unloading area for obstructions, spills, leaks, stains	Daily (When in use)	Visual

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TABLE II: INSPECTION SCHEDULE
FOR EMERGENCY AND SAFETY EQUIPMENT

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Absorbent Material	Weekly	Visual
2. Forklift	Weekly	Visual/Physical
3. Fire Extinguishers	Weekly	Visual
4. First Aid Kit	Weekly	Visual
5. Eye Wash Station/ Safety Shower	Weekly	Visual/Physical
6. Respirator	Weekly	Visual
7. Self-contained Breathing Apparatus	Weekly	Visual/Physical
8. Protective Clothing	Weekly	Visual
9. Two-way Radios	Daily	Visual/Physical
10. Alarm System	Monthly	Visual/Physical
11. Sump Pump	Weekly	Visual/Physical
12. Polypropylene Pad	Weekly	Visual

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ATTACHMENT D

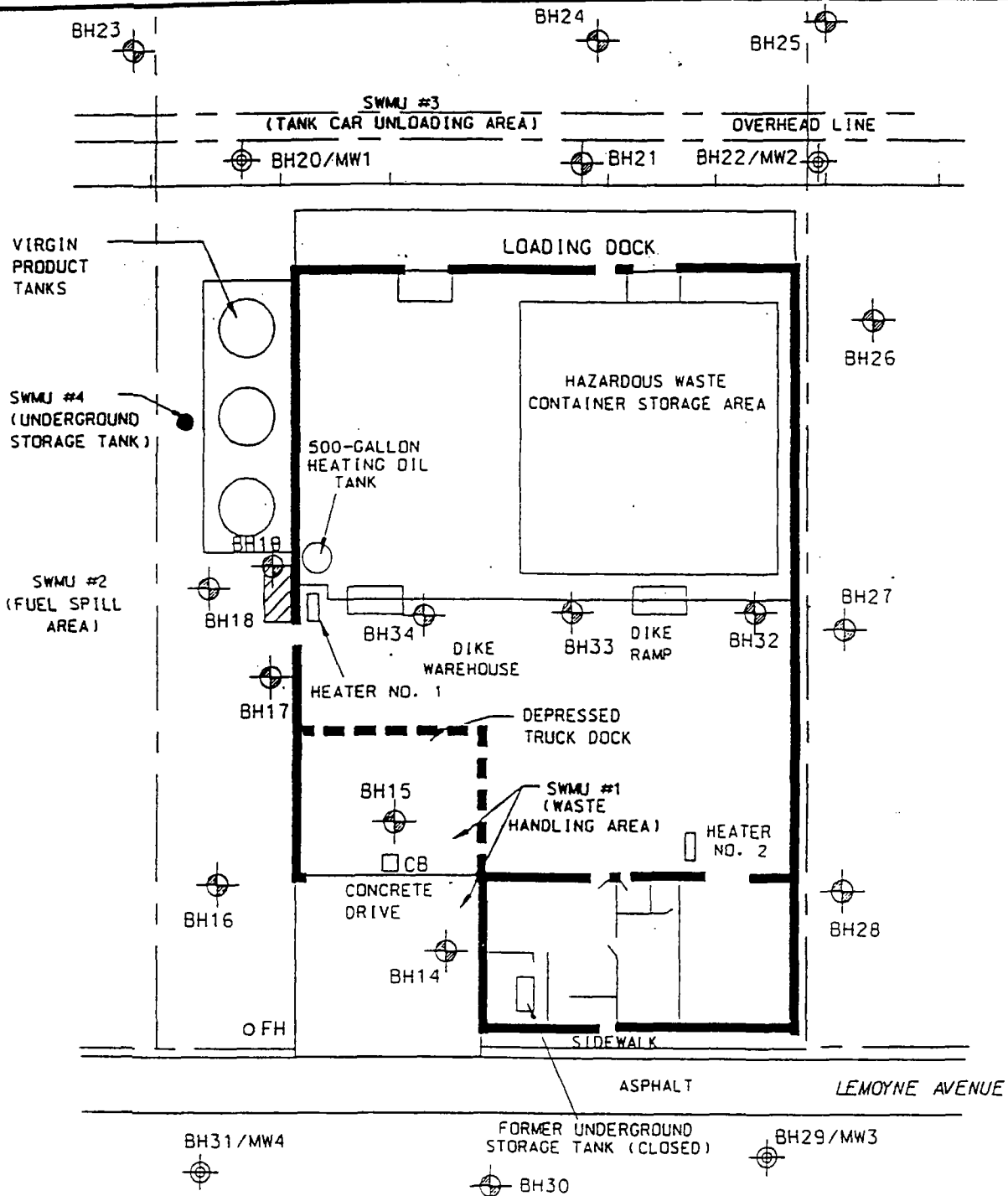
REQUIRED SCOPE OF WORK FOR a RCRA

FACILITY INVESTIGATION

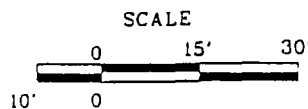
ILD074424938

LPC #0311860003

Part B Log #113R



SOURCE: ENVIRONMENTAL SCIENCE
& ENGINEERING, INC.



LEGEND

- PHASE II BORING LOCATION
- PHASE II BORING COMPLETED AS MONITORING WELL
- PROPERTY

DETREX CORPORATION

**FIGURE 2/SITE PLAN
DETREX CORPORATION
MELROSE PARK, ILLINOIS**

JOB NO. 32904-003-158 DAMES & MOORE

Attachment D.2
Scope of Work for a RCRA Facility Investigation
Detrex Corporation

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) for this permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Detrex, and "SWMU" refers to Solid Waste Management Unit.

I. PURPOSE

The purpose of the RFI is to determine the nature and extent of releases of hazardous waste or hazardous constituents from SWMUs located at Detrex facility in Melrose Park, Illinois and to gather data necessary to develop and implement a Corrective Measures Program (CMP). Specifically, the information gathered during the RFI will be used to help determine the need, scope and design of a corrective measures program.

II. RFI WORKPLANS

Detrex shall prepare a detailed workplan for the Phase III RFI which is reviewed and approved by the Agency prior to conducting the Phase III RFI. The workplan must, at a minimum, contain the information identified in III.A-III.H below. The information in the workplan must be presented in a manner which is similar to the format set forth in these sections. Information provided in previous RFI workplans may be incorporated the workplan by reference; information already submitted in the Part B permit application may also be incorporated by reference. When incorporating information by reference, a clear reference must be made to the location of the information in the document, including page number and date information was submitted.

II.A. INTRODUCTION (required for all workplans)

A general discussion of the contents and goals of each workplan must be provided as an introductory portion of the workplan. This introduction should also discuss, in general, the facility and the SWMUs being investigated.

II.B. ADMINISTRATIVE OUTLINE

Detrex shall submit as part of the RFI workplan a general outline defining the RFI objectives, technical approach, and scheduling of tasks during that phase of the RFI. Detrex

shall prepare a Project Management Plan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel.

II.C. NATURE AND EXTENT OF CONTAMINATION

The Phase III Workplan must contain the following information, to the extent known for each SWMU of concern.

- a. Location of unit;
- b. The horizontal and vertical boundaries of each unit;
- c. Details regarding the construction, operation and structural integrity of each unit;
- d. A description of all materials managed and/or disposed at each SWMU including, but not limited to, solid waste, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility including:
 - (1) Type of waste or hazardous constituents placed in the units, including source, hazardous classification, quantity and chemical composition;
 - (2) Physical and chemical characteristics, including physical form, physical description, general chemical class, cohesiveness of the waste;
- e. Quantities of solid and hazardous wastes managed at the unit;
- f. The history of the utilization of each SWMU and the surrounding areas, including the period of operation and age of the unit;
- g. Methods used to close the unit, if applicable;
- h. All available data and qualitative information on the level of contamination present at the SWMU;
- i. A description of the existing degree and extent of contamination at each unit area.

II.D. SOIL SAMPLING/ANALYSIS PLAN

The Phase III Workplan must provide for a determination of the extent of releases of hazardous waste and hazardous constituents into the soil around and under each SWMU. To meet this requirement, the plan must identify:

- a. The procedures which will be used to describe and characterize the soils in and around the subject SWMU(s) down to the water table, including, but not limited to, the following:
 1. Unified Soil Classification;
 2. Soil profile; and
 3. Elevation of water table;
- b. The parameters and hazardous constituents to be used to establish the presence or absence of contamination. These must include, but are not limited to, specific hazardous constituents of wastes known or suspected to have been managed by the SWMU(s) as identified and determined by the unit characterization information presented in the workplan.
- c. The basis for selecting the parameters and constituents in (b) above.
- d. The methodology for choosing sampling locations, depths, and numbers of samples.
- e. Sampling procedures for each parameter or constituent to be analyzed. Unless detailed procedures are otherwise contained in the workplan, all soil samples collected must be handled in accordance with Test Methods for Evaluating Solid Waste, Third Edition and finalized updates (SW-846) and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed.
- f. Analytical methods to be used in the analysis of the samples. The procedures set forth in SW-846 shall be followed. Otherwise a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods must be provided.
- g. Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.

II.E. HYDROGEOLOGIC AND HYDROLOGIC INVESTIGATION SAMPLING AND ANALYSIS PLAN

The Phase III hydrogeologic and geologic investigation plan must provide descriptions of groundwater monitoring systems which will provide adequate data on the detection, nature, extent and rate, and concentration of any release to the groundwater at the facility at the SWMU of concern.

The information which must be provided regarding the Phase III investigation of hydrogeology and hydrology at each SWMU identified above includes:

- a. Information, as it is available, regarding:
 - (1) The regional geologic and hydrogeologic characteristics in the vicinity of the facility, including stratigraphy, hydrogeologic flow and the areas of recharge and discharge.
 - (2) Any topographic or geomorphic features that might influence the groundwater flow system;
 - (3) The hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; and interpretation of hydraulic interconnections between saturated zones, and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;
 - (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
 - (5) The water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and

- (6) Any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures within 1500 feet of the facility boundary.
- b. Procedures for obtaining information identified above which was not obtained during preparation of the workplan.
 - c. Documentation that sampling and analysis of groundwater monitoring wells will be carried out in accordance with the approved Data Collection Quality Assurance Plan. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD), where appropriate, and the latest version of the Agency's DLPC design criteria. At a minimum:
 - (1) The groundwater monitoring wells must consist of monitoring wells installed in the uppermost aquifer and in each underlying aquifer (e.g., sand units) which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMUs, except to the extent that SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are (a) representative of background quality in the uppermost aquifer and units hydraulically interconnected beneath the facility and (b) not affected by SWMUs at the subject facility; and
 - (3) Monitoring wells in each appropriate aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations and depths must ensure that they allow for detection of releases of hazardous waste or hazardous constituents from the SWMU(s).
 - d. A sampling plan which specifies:
 - (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes determined to have been placed in or released from the SWMUs (including any possible degradation products);

- (2) The basis for selecting the parameters and constituents in (1) above;
- (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths, and concentration specifications for each monitoring well;
- (4) Sampling procedures for each parameter or constituent to be analyzed, including sampling frequency;
- (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods will be provided; and
- (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.

II.F. SITE-SPECIFIC SAMPLING PLANS

Detrex shall prepare detailed site-specific sampling plans to be submitted as part of the work for each phase of the RFI which address all field activities needed to obtain site-specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever appropriate, sample collection, handling, preservation, preparation and analysis described in Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, Third Edition (SW-846) and finalized updates. In addition, samples to be analyzed for volatile organic compounds must be collected in accordance with Illinois EPA's Volatile Sampling. The plans must address all levels of the investigations, as well as types of investigations conducted on specific environmental media (i.e., soil, air, surface water, groundwater). The plans must describe in detail how each phase of the RFI will be implemented.

Site-Specific sampling and analysis plan should contain the following informational:

1. Goals and Objectives of Effort - A discussion of the goals and objectives of the sampling/analysis effort should be included in the plan. This will have an impact on the overall plan, as the sampling/analysis effort required to demonstrate that an area is clean is very different than that required to determine the horizontal and vertical extent of contamination.

2. Parameters to be Analyzed - A list of proposed parameters along with a discussion justifying their inclusions should be included in the plan. The proposed parameters should include those hazardous constituents which may be present based upon a knowledge of the wastes managed at the unit and the facility overall. This list should include degradation products. Additional parameters for analysis may be required by the Agency, depending on its review of the wastes and other materials managed at the facility.
3. Sample Locations - A scaled map should be provided in the plan showing the location where the samples are to be collected.
4. Sampling Depth - As appropriate, the sampling should identify the depth from which each sample is to be collected.
5. Sample Collection Procedures - The procedures which will be used to collect the samples must be described in the closure plan. The following should be considered in developing these procedures:
 - a. Sampling methods and equipment should follow guidance in USEPA's TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS Third Edition and all finalized updates.
 - b. Field sampling methods not included in SW-846 must be approved by IEPA before they are used in the closure. This includes methods such as drilling, borings, etc. When available, standards procedures, as defined by USEPA, IEPA or ASTM, should be followed.
 - c. Soil and sediment samples collected for volatile organics analysis require specialized sampling and handling procedures, as specified in the Agency's volatile compound sampling procedure. Unless extenuating circumstances dictate otherwise, soil samples collected for volatile organic analysis should not be mixed, composited or otherwise aerated. If extenuating circumstances prevail, then procedures must be made to minimize (1) the time the sample is exposed to the air; (2) aeration of the sample and (3) agitation of the sample. No mixing of compositing of samples should ever take place if they are to be analyzed for VOCs.
 - d. All soil encountered during the sampling effort should be field classified in accordance with ASTM D-2488. Provisions should be made in the plan to make this classification, except for samples collected specifically for VOC analysis.

- e. If a drill rig or other piece of equipment is necessary to collect soil samples:
 - 1. The procedures specified in ASTM Method D-1586 (Split Spoon Sampling) or D-1587 (Shelby Tube Sampling) must be used in collecting the samples;
 - 2. Soil samples should be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.
 - f. Soil and sediments encountered in an area where VOC contamination is a concern should be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory should not be field-screened.
 - g. In general, samples should never be composited.
 - h. The procedures which will be used to decontaminate the sampling equipment after each sample is collected should also be described. Decontamination procedures should be carried out in accordance with SW-846.
 - i. The actual material placed in the container for future analysis should be obtained from any visually contaminated portion of the sample.
6. Sample Handling Procedures - The sampling plan should describe the procedures which will be used to store, preserve and transport the collected soil samples to the laboratory, including chain-of-custody procedures. These procedures should be carried out in accordance with the guidance in SW-846, Third Edition and all finalized updates.
7. Analytical Procedures - The sampling/analysis plan should identify the procedures which will be used to prepare the samples for analysis and to analyze them. In general, such procedures should be carried out in accordance with those set forth in SW-846, Third Edition, and all finalized updates. The actual portion of the sample to be analyzed should be obtained from visually contaminated material if any is present. The procedures specified must be sufficient to analyze for all the parameters identified in the closure plan. The estimated quantitation limits and/or practical quantitation limits to be achieved should also be identified. Again, these limits should meet the requirements set forth in SW-846. It must be noted that it is especially important to achieve low detection limits if the goal of the sampling/analysis effort is to demonstrate that little or no contamination exists in a given area. To demonstrate a parameter is not present in a sample, the PQL achieved must be at least as low as that specified in SW-

846. Low detection limits may not be as necessary when collecting samples in contaminated areas.

8. Any additional items required in the other portions of this section regarding the sampling/analysis of specific environmental media.

II.G. DATA COLLECTION QUALITY ASSURANCE

Detrex shall prepare a plan which describes the procedures which will be used to carry out and monitor all sampling and analysis efforts to ensure that all information and data collected are technically sound, statistically valid and properly documented. Such a plan, referred to as a Quality Assurance Project Plan, must be developed using a format in which the fourteen items listed below are discussed in detail:

1. Project Description
2. Project Organization and Responsibility
3. Quality Assurance Objectives for Data Measurements
4. Sampling Procedures
5. Sample Custody
6. Calibration Procedures and Frequency
7. Analytical Procedures
8. Data Reduction, Validation and Reporting
9. Internal Quality Control Audits
10. Performance and System Audits
11. Preventative Maintenance
12. Specific Routine Procedures Used to Assess Data Precision, Accuracy and Completeness
13. Corrective Action

14. Quality Assurance Reports to Management

Of special concern in the development of a QAPP are (1) the use of trip blanks, field blanks and laboratory blanks and (2) calibration and verification of the laboratory procedures and equipment used to analyze the samples. All procedures used in this RFI must meet the requirements of Test Methods for Evaluating Solid Wastes, Third Edition (SW-846), and all finalized updates. As such, the quality assurance/quality control procedures carried out during the RFI must meet the requirements set forth in SW-846.

II.H. DATA MANAGEMENT PLAN

Detrex shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation(s).

III. IMPLEMENTATION OF RFI

Detrex shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s), Illinois EPA approval letter and the RFI schedule.

IV. FINAL RFI REPORT

- A. Report documenting the results of the Phase III RFI must be developed in accordance with the following:
 - 1. The portion of the report documenting the results of the required soil/air/surface water/sediment/sampling/analysis effort should contain the following:
 - a. A discussion of: (1) the reason for the sampling/analysis effort conducted at each WMU and (2) the goals of the sampling analysis effort conducted at each WMU;

- b. A scaled drawing showing the horizontal and vertical location where all samples were collected relative to each SWMU and/or other relevant structures;
- c. Justification for the selected sample locations;
- d. A description of the procedures used for:
 - (1) Sample collection;
 - (2) Sample preservation;
 - (3) Chain of custody; and
 - (4) Decontamination of sampling equipment;
- e. Visual classification of each soil sample collected for analysis;
- f. A discussion of the results of any field screening efforts;
- g. Logs of all soil borings made during the investigation;
- h. A description of the soil types encountered during the investigation, including scaled cross-sections;
- i. A description of the procedures used to analyze the samples, including:
 - (1) The analytical procedure used, including the procedures, if any, used to prepare the sample for analysis;
 - (2) Any dilutions made to the original sample;
 - (3) Any interferences encountered during the analysis of each sample; and
 - (4) The practical quantitation limit (PQL) achieved, including justification for reporting PQLs which are above SW-846 levels.
- j. A description of all quality control/quality assurance analyses conducted, including the analysis of lab blanks, trip blanks and field blanks;

- k. A description of all quality assurance/quality control efforts made overall;
 - l. A tabular summary of all analytical data, including QA/QC results;
 - m. Copies of the final laboratory sheets which report the results of the analyses, including final sheets reporting QA/QC data;
 - n. Colored photographs documenting the sampling effort; and
 - o. A discussion of the collected data. This discussion should (1) identify those sample locations where contaminants were detected and the concentrations of the contaminants and (2) evaluate the data collected. This discussion should focus on the data collected during the recent investigation and on data previously collected.
2. The portion of the final report documenting the results of the required subsurface and groundwater investigation should contain, at a minimum, the following information for each WMU:
- a. Logs of the borings made during the required subsurface investigation and/or for monitoring well installation;
 - b. A description of the procedures used in carrying out the subsurface investigation (including the boring procedures) and in any installation of the monitoring wells;
 - c. Results of all tests conducted in-situ or in the laboratory and a discussion of the procedures used in carrying out the tests;
 - d. Completed IEPA Well Completion Reports;
 - e. Scaled drawings showing the location where all borings were made and where all monitoring wells were installed;
 - f. Well development procedures;
 - g. A discussion of the geology and hydrogeology of the areas being investigated, including:
 - (1) A detailed description of the geology;
 - (2) Physical characteristics of each geologic strata encountered;

- (3) Identification of water bearing units encountered;
 - (4) Depth to the water table;
 - (5) The horizontal and vertical components of groundwater flow in the water bearing units;
 - (6) The hydraulic conductivity of the water bearing units.
- h. A minimum of two cross-sections depicting the subsurface geology and hydrogeology. These cross-sections should be as close to perpendicular to each other as possible, so that a three-dimensional presentation of this information can be depicted;
 - i. Information regarding the groundwater sampling/analysis effort as identified in Items 1.a, 1.d, 1.f, 1.h, thru 1.l and 1.n above;
 - j. Water level measurements made prior to the collection of the groundwater samples; and
 - k. Maps and supporting data identifying the piezometric surface of the groundwater beneath the facility and the direction of groundwater flow.

Attachment D.3
Corrective Measures Program Requirements for Detrex

1.0 INTRODUCTION/PURPOSE

At the end of a RCRA Facility Investigation, the concentration of contaminants present at a SWMU or other area of concern is typically compared to corrective action objectives developed in accordance with 35 Ill. Adm. Code 742. If the contaminant levels are above these objectives, then some type of corrective measure must be completed to achieve these objectives. In addition, certain corrective measures may need to be carried out to support the corrective action objectives (i.e., the establishment of engineered barriers and/or institutional controls).

While the above scenario is typically carried out at the end of an RFI for a given SWMU, it is not always the case. Specifically, if waste is to remain in place at a SWMU and it will be closed as a landfill, then the corrective measure for that SWMU would consist of: (1) construction of a final cover over the SWMU; and (2) post-closure care (including groundwater monitoring and as necessary, groundwater remediation) of the closed unit.

This document describes the procedures which must be followed to complete the necessary corrective measures for the SWMUs at the Detrex facility in Melrose Park, Illinois. These procedures, in total, are typically referred to as a Corrective Measures Program (CMP).

2.0 BRIEF OVERVIEW OF THE REQUIRED CORRECTIVE MEASURES PROGRAM

As indicated above, Detrex may eventually be required to develop and implement a corrective measures program to address contamination encountered during the RFI conducted at its facility in Melrose Park, Illinois. To allow for a logical and orderly implementation, the CMP should be implemented in five phases which build on each other. However, it is not necessary for the CMP at a given SWMU or other areas of concern to follow these five phases step-by-step. Rather, phases can be combined and/or skipped, depending on the actual corrective measure selected. The overall CMP implemented must set forth a logical path for its implementation and allow for Illinois EPA oversight and approval throughout the entire process.

A brief discussion of the typical five phases of a CMP is as follows:

1. Phase I is the conceptual design of the selected corrective measure(s).

2. Phase II is the development of final design plans for the corrective measure, including installation and operation/maintenance plans.
3. Phase III is the actual construction/installation of the selected corrective measure.
4. Phase IV is the operation, maintenance, and monitoring of the selected corrective measure to ensure it is properly protecting human health and the environment.
5. Phase V is the final demonstration/verification that the implemented corrective measure: (1) achieved the approved corrective action objectives; or (2) post-closure care for any SWMU closed as a landfill has been properly implemented.

Sections 3.0 through 7.0 which follow provide a more detailed discussion of each of these five phases. Section 8.0 has been developed to describe the corrective measures program which should be used in lieu of the afore-mentioned five phase procedure when soil removal is the selected remedy.

It must be noted that work plans, reports, etc. must be developed to document how the Permittee carries out the required corrective measures program at each SWMU or other areas of concern. All such documents must be reviewed and approved by Illinois EPA prior to their implementation.

3.0 PHASE I OF THE CMP

Phase I of the CMP includes selection of the corrective measure to be taken and developing a basis for completing the final design of the measure. This effort should be documented in a Conceptual Design Report which describes the proposed corrective measure for each SWMU and other areas of concern and provides a conceptual design for these measures. Typically, the main criteria for Illinois EPA review is whether the proposed corrective measures are able to achieve the final corrective action objectives previously established by the Permittee and the Illinois EPA and/or provide the necessary institutional controls to prevent the migration of contaminants from the SWMU of concern. However, this would not be the case if the selected corrective measure was closing the unit as a landfill and then providing adequate post-closure care (under this scenario, the main criteria for review could be ensuring the adequacy of the final cover system and post-closure care program).

The Conceptual Design Report should contain the following sections:

1. Introduction/Purpose. This section should contain: (1) general background information regarding the project; (2) the purpose and goals of the submittal; and (3) the scope of the project.
2. Existing Site Conditions. This section should contain a summary of the investigative activities conducted for each of the units of concern. Investigation analytical results should be provided in tabular form, and maps depicting both the horizontal and vertical extent of contamination at the site should be provided.
3. Evaluation for Potential Future Migration. Based on the existing site conditions, a conceptual model of the site should be developed and presented in this section. The potential for additional future migration of contamination for each of the units of concern must then be evaluated, especially those units which have been determined to have released hazardous waste/hazardous constituents to the groundwater. It may be helpful to develop conceptual models for contaminant migration. Of special concern in this evaluation are (1) the physical properties of the contaminants (solubility, volatility, mobility, etc.); and (2) existing site conditions (types of soil present, location of contamination, hydrology, geology, etc.).
4. Identification of Options Available. This section should contain a brief discussion of the various options available to achieve the corrective measures objectives for each unit. This discussion should identify: (1) a general overview of each option available, including how the option will achieve the stated objective; (2) the advantages associated with each option; (3) the disadvantages associated with each option and (4) an estimate of the cost associated with choosing each remedial option.
5. Description of Selected Corrective Measure. This section should contain a qualitative discussion of the corrective measure chosen, along with the rationale which was used to select this measure from all those identified initially. This discussion should include documentation that the selected corrective measure will be effective.
6. Corrective Measures Objectives. In general, this section should discuss the general objectives of the proposed corrective measure to be constructed/installed, and the ability of the proposed corrective measure to achieve the established corrective action objectives. If the selected corrective measure is closure as a landfill which will require proper establishment of a final cover and proper post-closure care of the closed unit, then this section should discuss the general objectives of the proposed closure/post-closure effort.

7. Identification of Design Criteria. This section should identify what information must be available to design the selected corrective measure.
8. Review of Available Information. This section should contain an evaluation of the existing information to ensure that it is sufficient to complete the design of the selected corrective measure. If insufficient information is available, then the report should contain procedures for collecting the required additional information.
9. Procedures for Completing the Design. This section should contain a description of the procedures which will be followed to complete the design of the corrective measure. This should include as appropriate:
 - a. Identification of the references and established guidance which will be used in designing the selected corrective measure. Justification for the selection of this procedure should also be provided.
 - b. A description of the procedures which will be used to complete the design of the corrective measure.
 - c. Identification of assumptions to be used in the design, and the impact these assumptions have on the overall corrective measure;
 - d. Significant data to be used in the design effort;
 - e. Identification and discussion of the major equations to be used in the design effort (including a reference to the source of the equations);
 - f. Sample calculations to be used in the design effort;
 - g. Conceptual process/schematic diagrams;
 - h. A site plan showing a preliminary layout of the selected corrective measure;
 - i. Tables giving preliminary mass balances;
 - j. Site safety and security provisions.

This information will form the technical basis for the detailed design of the remedial measure and the preparation of construction plans/specifications.

10. Identification of Required Permits. This section should identify and describe any necessary permits associated with the selected corrective measure, as well as the procedures which will be used to obtain these permits.
11. Long-lead Procurement Considerations. This section should identify any elements/components of the selected corrective measure which will require a large amount of time to obtain/install. The following issues should also be discussed: (1) the reason why it will take a large amount of time to obtain/install the item; (2) the length of time necessary for procurement and (3) recognized sources of such items.
12. Project Management. This section should contain information regarding the procedures and personnel which will be involved in completing the design of the selected corrective measure. A schedule for completing the design should also be provided.

4.0 PHASE II OF THE CMP

Once the Illinois EPA approves the Conceptual Design Report, the facility should complete the design of the approved corrective action (Phase II of the CMP). Upon final completion of the design, a Final Design Report, consisting of final plans, specifications, construction work plan, etc., must be submitted to the Illinois EPA for review and approval.

Several documents must be submitted to the Illinois EPA as part of Phase II of the CMP. The following text describes the expected contents of the various documents which should be developed and submitted to the Illinois EPA as part of Phase II of the CMP.

1. Final Design Report and Construction Work Plan. The Final Design Report and Construction Work Plan must contain the detailed plans, specifications and drawings needed to construct the corrective measure. In addition, this document must contain (1) calculations, data etc., in support of the final design; and (2) a detailed description of the overall management strategy, construction quality assurance procedures and schedule for constructing the corrective measure. It must be noted that the approved Conceptual Design Report forms the basis for this final report. The information which should be provided in this document includes:
 - a. Introduction/Purpose. This portion of the document should: (1) provide background information regarding the project, (2) describe the purpose and goals of the project, and (3) describe the scope of the project.

- b. Detailed Plans of the Design System, including the following:
 - 1. Plan views;
 - 2. Section and supplementary views which, together with the specifications and general layouts, facilitate construction of the designed system;
 - 3. Dimensions and relative elevations of structures;
 - 4. Location and outline form of the equipment;
 - 5. Ground elevations; and
 - 6. Descriptive notations, as necessary, for clarity.
- c. Technical Specifications. Complete technical specifications for the construction of the system, including, but are not limited to, the following:
 - 1. All construction information, not shown in the drawings, which is necessary to inform the contractor in detail as to the required quality of materials, workmanship, and fabrication of the project;
 - 2. The type, size, strength, and operating characteristics of the equipment;
 - 3. The complete requirements for all mechanical and electrical equipment, including machinery, valves, piping and jointing of pipe;
 - 4. Electrical apparatus, wiring and meters;
 - 5. Construction materials;
 - 6. Chemicals, when used;
 - 7. Miscellaneous appurtenances;
 - 8. Instruction for testing materials and equipment as necessary; and
 - 9. Availability of soil boring information.

- d. Project Management. A description of the construction management approach, including the levels of authority and responsibility, lines of communication and qualifications of key personnel who will direct corrective measures construction/installation must be provided in the work plan.
 - e. Construction Quality Assurance/Quality Control. A construction quality assurance/quality control plan describing the procedures which will be followed to ensure the corrective measure is constructed/installed in accordance with the approved plans and specifications.
 - f. Schedule. The work plan must contain a schedule for completion of all major activities associated with construction/installation of the selected corrective measures. All major points of the construction/installation should be highlighted.
 - g. Waste Management Practices. This portion of the document should identify the wastes anticipated to be generated during the construction/installation of the corrective measures, and provide a description of the procedures for appropriate characterization and management of these wastes.
 - h. Required Permits. Copies of permit applications submitted to other Bureaus of the Illinois EPA for the selected corrective measure must be provided in the report. If it is determined that no permit is required for construction/installation and implementation of the corrective measures, rationale and justification must be provided to support this contention.
 - i. Cleanup Verification. The report must contain the procedures which will be followed that the approved remediation objectives have been achieved when operation of the system is completed.
2. Operation and Maintenance Plan. An Operation and Maintenance Plan must be developed and submitted as part of Phase II of the CMP. This plan should outline the procedures for performing operations, long term maintenance, and monitoring of the corrective measure.
- a. Introduction and Purpose. This portion of the document should provide a brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.
 - b. System Description. This portion of the document should provide a description of the corrective measure and significant equipment, including manufacturer's

specifications. This portion of the permit should also include a narrative of how the selected system equipment is capable of complying with the final engineered design of the corrective measure.

- c. Operation and Maintenance Procedures. This portion of the document should provide a description of the normal operation and maintenance procedures for the corrective measures system, including:
 - 1. Description of tasks for operation;
 - 2. Description of tasks for maintenance;
 - 3. Description of prescribed treatment or operation conditions; and
 - 4. Schedule showing the frequency of each operation and maintenance task.
- d. Inspection Schedule. This portion of the document should provide a description of the procedures for inspection of the corrective measures system, including problems to look for during the inspection procedure, specific inspection items, and frequency of the inspections.
- e. Waste Management Practices. This portion of the document should provide a description of the wastes generated by the corrective measure, and the appropriate procedures for proper characterization/management of these wastes.
- f. Contingency Procedures. This portion of the document should provide a description of the procedures which will address the following items:
 - 1. System breakdowns and operational problems including a list of redundant and emergency backup equipment and procedures;
 - 2. Alternative procedures (i.e., stabilization) which are to be implemented in the event that the corrective measure fails. The alternative procedures must be able to prevent release or threatened releases of hazardous wastes/hazardous constituents which may endanger human health and the environment, or exceed cleanup standards.
 - 3. Notification of facility and regulatory personnel in the event of a breakdown in the corrective measures, including written notification identifying what

occurred, what response action is being taken and any potential impacts on human health and the environment.

5.0 PHASE III OF THE CMP

Once the final design report is approved by the Illinois EPA, construction/installation of the approved corrective measure must commence. During this period, quarterly reports should be submitted which contain the following information:

1. Summary of activities completed during the reporting period;
2. An estimate of the percentage of the work completed;
3. Summaries of all actual or proposed changes to the approved plans and specifications or its implementation;
4. Summaries of all actual or potential problems encountered during the reporting period;
5. Proposal for correcting any problems; and
6. Projected work for the next reporting period.

Upon completion of construction/installation of the approved corrective measure, (including construction of a final cover system over a SWMU being closed as a landfill and establishment of the approved groundwater monitoring program) a Construction Completion Report must be submitted to the Illinois EPA documenting that these efforts were carried out in accordance with the Illinois EPA approved plans and specifications. This report should contain a thorough description of the efforts that went into constructing/installing the corrective measure and demonstrate that the procedures in the Illinois EPA-approved Final Design Report were followed during this effort. Such a report should be formatted in a logical and orderly manner and contain the following information:

1. An introduction discussing the background of the project and the purpose and scope of the corrective measure described in the report.
2. Identification of the plans, technical specifications and drawings which were used in constructing/installing the corrective measure. These specifications and drawings should have been approved by the Illinois EPA during Phase II.

3. Identification of any variations from the Illinois EPA approved plans, technical specifications and drawings used in construction/installing the corrective measure. Justification regarding the need to vary from the approved plans and specifications must also be provided.
4. A description of the procedures used to construct/install the corrective measure, including the procedures used for quality assurance and quality control.
5. As-built drawings, including identification of any variations from the approved plans, technical specifications and drawings.
6. A summary of all test results from the construction/installation effort, including quality assurance/quality control testing.
7. Actual test results, including quality assurance/quality control test results. These results should be located in an attachment/appendix and be well organized.
8. Identification of any test results which did not meet the specified value and a description of the action taken in response to this failure, including re-testing efforts.
9. Photographs documenting the various phases of construction.
10. A detailed discussion of how the construction/installation effort met the requirements of the approved Final Design Report.
11. A certification meeting the requirements of 35 Ill. Adm. Code 702.126 by an independent qualified, licensed professional engineer and by an authorized representative of the owner/operator.

6.0 PHASE IV OF THE CMP

Once the corrective measure has been constructed/installed, it must be operated, maintained and monitored in accordance with the approved plans and specifications (this is Phase IV of the CMP). During this period, quarterly reports must be submitted to the Illinois EPA documenting the results of these efforts (including the required post-closure efforts for SWMUs closed as landfills). These reports include the following:

1. Introduction. -- A brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.

2. System Description. -- A description of the corrective measures constructed/installed at the site, and identify significant equipment. Describe the corrective measure and identify significant equipment.
3. Monitoring Results. -- A description of the monitoring and inspection procedures to be performed on the corrective measures (including the required post-closure efforts for SWMUs closed as landfills). A summary of the monitoring results for the corrective measures, including copies of any laboratory analyses which document system effectiveness, provide a description of the monitoring procedures and inspections performed, and include a summary of the monitoring results for the corrective measure. Copies of all laboratory analytical results which document system monitoring must be provided.
4. Effectiveness Determination. -- Calculations and other relevant documentation which demonstrates the effectiveness of the selected corrective measure in remediating/stabilizing contamination to the extent anticipated by the corrective measures final design. Copies of relevant analytical data should be provided to substantiate this determination.
5. System Effectiveness Recommendation. -- Based upon the results of the effectiveness determination required under Item 4 above, recommendations on continued operation of the corrective measure must be provided. If the corrective measure is not performing in accordance with the final design, a recommendation on revisions or expansion of the system should be provided. Additionally, based upon the monitoring results, a schedule for achieving the cleanup standards would be included with each determination.

7.0 PHASE V OF THE CMP

Once all corrective measures have been completed, a report must be developed documenting all the efforts which were carried out as part of implementing the corrective measure and demonstrating, as appropriate, that the approved corrective action objectives have been achieved. If the selected corrective measure was closing the SWMU as a landfill and then providing post-closure care, this report would be submitted at the end of the post-closure care period and this report would contain information demonstrating that post-closure care of the unit had been carried out in accordance with the approved plan.

8.0 PROCEDURES WHICH SHOULD BE FOLLOWED WHEN SOIL REMOVAL IS THE SELECTED CORRECTIVE MEASURE

Sections 3 through 7 above describe the procedures which should be followed when it is necessary to design some type of physical corrective measure (e.g., a final cover system, some type of treatment system, etc.). However such detail is not necessary if excavation/removal is selected as the remedial action for the contaminated soil encountered at the site. In general, a work plan should be developed for this effort (for Illinois EPA review and approval) which fully describes each step to be used in removing the contaminated soil from the property. This includes a description of (1) the equipment utilized in the removal effort, (2) the pattern followed in removing the soil; (3) the depth to which the soil will be removed; (4) management of the soil on-site after it is removed from the ground; (5) loading areas; (6) the ultimate destination of the soil; and (7) any other steps critical to the removal effort.

One way to conduct a soil removal effort is to collect and analyze a sufficient number of soil samples to clearly determine the horizontal and vertical extent of soil contamination prior to conducting the soil removal effort. The boundaries of soil which must be removed are defined by the Illinois EPA established cleanup objectives for the project. Soil excavation must extend to sample locations where soil test results indicate that the remediation objectives are met. Closure verification sampling is not necessary in such cases, if a registered professional engineer oversees the soil removal effort and certifies that the remediation limits extend to these boundaries.

Another way to conduct a soil removal effort is to collect and analyze a limited number of soil samples prior to the soil removal effort and to rely mainly on field observation to determine the extent of the soil removal. In such cases closure verification sampling is necessary. Soil samples must be collected for analysis from the bottom and sidewalls of the final excavation. The following sampling/analysis effort is necessary to demonstrate that the remaining soil meets the established cleanup objectives:

1. A grid system should be established over the excavation.
2. Samples should be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.
3. Samples should be collected at 6"-12" below the ground surface (bgs) along the excavation sidewalls at each grid intersection around the excavation perimeter. Samples must also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.

4. Collection/analysis of all required samples must be in accordance with the procedures set forth in the approved plan.
5. Soil samples which must be analyzed for volatile organic compounds (VOCs) should be collected using Attachment A of the Illinois EPA RCRA closure plan guidance (November 1994). In addition, such samples must be collected 6"-12" beneath the floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.
6. No random sampling may be conducted to verify achievement of cleanup objectives have been met.
7. Additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established cleanup objectives. Additional samples must be collected and analyzed in accordance with the procedures described above from areas where additional soil has been removed.

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- (3) The basis for selecting the parameters and constituents in (2) above;
 - (4) The methodology for choosing sampling locations, depths, and numbers of samples;
 - (5) Sampling procedures for each parameter or constituent to be analyzed. All soil samples to be taken must be handled in accordance with 40 CFR 261, Appendix III and Illinois EPA's DLPC soil volatile sampling procedure if volatiles are to be analyzed;
 - (6) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods must be provided, and
 - (7) Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.
- b. If Illinois EPA's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred, or the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the soil. This workplan shall address and/or include, at a minimum:
- (1) A description of what is known about the horizontal and vertical extent of the contamination;
 - (2) A description of contaminant and soil chemical properties within the contaminant source area and plume, including solubility, specification, absorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation (if known);
 - (3) Specific contaminant concentrations (if known);
 - (4) The velocity and direction of contaminant movement (if known);
 - (5) An extrapolation of future contaminant movement (if known); and

- (6) The methods and criteria to be used to define the boundaries of the plume(s) of contamination.

2. Hydrogeologic and Hydrologic Investigation

The Phase II sampling plan, if required, must provide descriptions of groundwater monitoring systems which will be capable of (1) determining whether or not any releases have occurred from the SWMUs and (2) will provide adequate data on the nature, extent and rate, and concentration of any releases identified.

Ground water monitoring will not be required for a SWMU if the permittee can demonstrate, based on the soils investigations in Section 1 above, that no releases have occurred from the SWMU (as determined by Illinois EPA's DLPC). If releases are determined to have occurred at a particular unit, then the Phase II workplan may have to address a hydrological investigation, including groundwater monitoring at that unit. The Permittee will be notified of the requirement to perform a hydrological investigation and groundwater monitoring for a specific SWMU at the time Illinois EPA notifies the Permittee that a Phase II Workplan is required.

Phase II groundwater monitoring efforts, if required, shall begin with a survey of previous hydrogeologic studies and other existing related data. The results of the survey shall be summarized in the Phase II report and summary.

- a. Except to the extent that adequate existing hydrogeologic data already exist which can be used in the investigation, a plan for evaluating groundwater flow patterns shall be designed to provide the following information:
 - (1) A description of the regional geologic and hydrogeologic characteristics in the vicinity, including local stratigraphy, regional hydrogeologic flow and areas of recharge and discharge;
 - (2) An analysis of any topographic or geomorphic features that might influence the groundwater flow system;
 - (3) A classification and description of the hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; an interpretation of hydraulic interconnections

between saturated zones; and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;

- (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
 - (5) A description of water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and
 - (6) A description of any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures.
- b. Sampling and analysis of all wells shall be carried out in accordance with the approved Data Collection Quality Assurance Plan as required in III.F. below. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD) and the latest version of Illinois EPA's DLPC design criteria. At a minimum:
- (1) The groundwater monitoring system must consist of monitoring wells in the uppermost aquifer and in each underlying aquifer, such as the sand units, which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMU, except to the extent SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are:

- (a) representative of background quality in the uppermost aquifer and aquifers hydraulically interconnected beneath the facility; and
 - (b) not affected by any SWMUs.
- (3) Monitoring wells in each aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations, and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous constituents that migrate from the SWMU(s).
- c. The sampling plan must specify:
- (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in or released from the SWMUs (including any possible degradation products);
 - (2) The basis for selecting the parameters and constituents in (1) above;
 - (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths and concentration specifications for each monitoring well to be used in the initial sampling effort;
 - (4) Sampling procedures for each parameter or constituent to be analyzed, including schedules for sampling;
 - (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
 - (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
 - (7) Proposal for establishing the locations, depths, and construction specifications for monitoring wells necessary to delineate the extent of

any plume. The methodology of the investigation, sampling procedures, analytical methods, and procedures for evaluating analytical results to establish the extent of the plume must be described. The workplan must also specify the criteria to be used to determine the limits of the plume.

3. Surface Water and Sediment

- a. The Phase I Workplan must provide for a determination of the presence or absence of releases of hazardous wastes and hazardous constituents into all surface waters or their sediments potentially affected by the SWMUs. A determination of "no impact" must be justified and documented to the satisfaction of Illinois EPA's DLPC. The plan must include, but is not limited to:
- (1) Description and characterization of all potentially affected surface waters, including locations, areas, depths, inflows and outflows, volumes of water, seasonal fluctuations, flooding tendencies, drainage patterns, on-site and off-site affected populations and activities;
 - (2) Description and characterization of sediment characteristics associated with all surface waters, including deposition areas, thickness profiles, and physical and chemical parameters;
 - (3) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. This must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (4) The basis for selecting the parameters and constituents in (3) above;
 - (5) The methodology for choosing sampling locations depths, and numbers of samples;
 - (6) Sampling procedures for each parameter of constituent to be analyzed;
 - (7) Analytical methods to be used in the analysis of the samples. If any of these methods are not identical to those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (U.S. EPA

SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and

- (8) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- b. If Illinois EPA's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the surface waters and sediments. The workplan shall include, at a minimum:
 - (1) A description of the horizontal and vertical extent of any plumes and the extent of contamination in the underlying sediments (if known);
 - (2) Specific contaminant concentrations (if known);
 - (3) The horizontal and vertical direction and velocity of contaminant movement (if known);
 - (4) An evaluation of the physical, biological, and chemical factors influencing contaminant movement (if known);
 - (5) An extrapolation of future contaminant movement (if known); and
 - (6) The criteria used to define the boundaries of the plumes.

4. Air

- (a) The Phase I Workplan must provide for an investigation to characterize the particulate and gaseous contaminants released into the atmosphere. A determination of "no impact" must be justified and documented to the satisfaction of Illinois EPA's DLPC. This investigation shall provide the following information:
 - (1) A description of the horizontal and vertical direction and velocity of contaminant movement;
 - (2) The rate and amount of release; and

- (3) The chemical and physical composition of the contaminants released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

- (b) The Phase I Workplan must provide for characterizing the climate in the vicinity of the facility. Such information shall include, but not be limited to:
 - (1) A description of the following parameters:
 - (a) Annual and monthly rainfall averages;
 - (b) Monthly temperature averages and extremes;
 - (c) Wind speed and direction;
 - (d) Relative humidity and dew point;
 - (e) Atmospheric pressure;
 - (f) Evaporation data;
 - (g) Development of inversions; and
 - (h) Climate extremes that have been known to occur in the vicinity of the facility, and the frequency of occurrence.
 - (2) A description of topographic and manmade features which affect air flow and emission patterns, including:
 - (a) Ridges, hills or mountain areas;
 - (b) Canyons or valleys;
 - (c) Surface water bodies;
 - (d) Wind breaks and forests;
 - (e) Buildings; and

(f) Other man-made features.

5. Source Characterization

The Phase I Workplan must provide for the collection of analytical data to completely characterize the hazardous wastes and/or hazardous constituents and the areas where hazardous wastes and/or hazardous constituents have been released, placed, collected or removed including: type, quantity, physical form, disposition (containment or nature of deposits); and facility characteristics affecting releases. This shall include quantification of the following specific characteristics at each source area:

a. Unit/Disposal Area Characteristics:

- (1) Location of unit/disposal area;
- (2) Type of unit/disposal area;
- (3) Design features;
- (4) Operating practices (past and present);
- (5) Period of operation;
- (6) Age of unit/disposal area;
- (7) General physical conditions;
- (8) Structural integrity (cracks, joints, gaps, patches, maintenance history, etc.); and
- (9) Method used to close the unit.

b. Waste or Hazardous Constituent Characteristics

- (1) Type of waste or hazardous constituents placed in the units:
 - (a) Source, if known;
 - (b) Hazardous classification;

- (c) Quantity; and
- (d) Chemical composition.

(2) Physical and chemical characteristics:

- (a) Physical form (solid, liquid, gas);
- (b) Physical description;
- (c) Temperature;
- (d) pH;
- (e) General chemical class (e.g. acid, solvent);
- (f) Molecular weight;
- (g) Density;
- (h) Boiling point;
- (i) Viscosity;
- (j) Solubility in water;
- (k) Cohesiveness of the waste;
- (l) Vapor pressure; and
- (m) Flash point.

(3) Migration and dispersal characteristics of the waste:

- (a) Sorption;
- (b) Biodegradability, bioconcentration;
- (c) Photodegradation rates;

- (d) Hydrolysis rates; and
- (e) Chemical transformations.

The Permittee shall justify and document the procedures used in making the above determinations.

6. Potential Receptors

The Phase I Workplan must provide for collection of data describing the human populations and environmental systems within a radius of 1,500 feet of the facility boundary. The following characteristics shall be identified:

- a. Local uses and possible future uses of groundwater:
 - (1) Type of use (e.g. municipal or residential drinking water source, industrial, etc.); and
 - (2) Location of groundwater users, including wells and discharge areas.
- b. Local uses and possible future uses of surface waters draining the facility:
 - (1) Domestic and municipal;
 - (2) Recreational;
 - (3) Agricultural;
 - (4) Industrial; and
 - (5) Environmental.
- c. Human use of, or access to, the facility and adjacent lands, including, but not limited to:
 - (1) Recreation;
 - (2) Agriculture;
 - (3) Residential;

- (4) Commercial;
 - (5) Zoning; and
 - (6) Location between population locations and prevailing wind direction.
- d. A description of the biota in surface water bodies on, adjacent to, or affected by the facility.
 - e. A description of ecology of, and adjacent to the facility.
 - f. A demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age, sex, and sensitive subgroups.
 - g. A description of any endangered or threatened species near the facility.

F. DATA COLLECTION QUALITY ASSURANCE

The Permittee shall prepare a plan to document all monitoring procedures, sampling, field measurements, and sample analysis performed during the investigation so as to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented. This shall be submitted with the RFI Phase I Workplan.

Quality Assurance. Sampling methods and equipment, as well as laboratory analytical methods, shall follow guidance in U.S. EPA's SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (see 40 CFR 260.11). Field sampling methods, including soil sampling, not included in SW-846 must be approved by Illinois EPA's DLPC before they are used in the RFI. This includes methods such as drilling, borings, etc. When available, standard procedures, as defined by U.S. EPA, Illinois EPA or ASTM, should be followed. All soil samples which are to be taken must be handled in accordance with 40 CFR, Part 261, Appendix III and Illinois EPA's soil volatile sampling procedures if volatile sampling is required. The analytical methods which will be used must be specified and must be EPA-approved.

Soil samples for volatile organics analysis require specialized sampling and handling procedures. Under no circumstances should soil samples for volatile organic analysis be mixed, composited or otherwise aerated.

G. DATA MANAGEMENT PLAN

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation. This shall be submitted with the RFI Phase I Workplan.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID number;
- e. Property or component measured; and
- f. Result of analysis.

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium and for each constituent monitored;
- c. Statistical analysis;
- d. Sorted data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

- a. Sampling location and sampling grid;
- b. Boundaries of sampling area, and areas where more data are required;
- c. Levels of contamination at each sampling location;
- d. Extent of contamination;
- e. Changes in concentrations in relation to the distance from the source, time, depth or other parameters; and
- f. Features affecting intermedia transport including potential receptors.

H. IMPLEMENTATION OF INTERIM MEASURES

The Permittee shall document and submit information on any interim measures which have been or are to be undertaken to abate threats to human health and the environment while the RFI or CAP are being completed. This information shall include, at a minimum:

1. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long term solution at the facility;
2. Design, construction, and maintenance requirements;
3. Schedules for design and construction; and
4. Schedules for progress reports.

If Illinois EPA determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

I. HEALTH AND SAFETY PLAN

Under the provisions of 29 CFR 1910 (54 FR 9,295, March 6, 1989), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

IV. IMPLEMENTATION OF RFI

The Permittee shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by Illinois EPA's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s) and the RFI schedule. Any actual or anticipated deviations from the Workplan(s) or the RFI schedule shall be reported no later than the time of submission of the next quarterly report subsequent to the determination of need or actual deviation from the Workplan.

V. SUBMISSION OF REPORTS AND RESULTS OF RFI ACTIVITIES

The Permittee must prepare and submit quarterly progress reports and a final report on the activities and results of the Phase I RFI activities and, if required, Phase II RFI activities. The quarterly reports shall contain at a minimum:

- A. An estimate of the percentage of the investigation completed;
- B. Summary of activities completed during the reporting period;
- C. Summaries of all actual or proposed changes to the Workplan or its implementation;

- D. Summaries of all actual or potential problems encountered during the reporting period;
- E. Proposal for correcting any problems;
- F. Projected work for the next reporting period; and
- G. Other information or data as requested in writing by Illinois EPA's DLPC.

The primary objective of the Phase I final report is to conclusively determine either the presence or absence of releases of hazardous waste or hazardous constituents to the groundwater, surface water, air, sediments, and soil. If it is determined by Illinois EPA's DLPC that there have been no releases, Illinois EPA's DLPC may recommend that further investigation is not needed. If the evidence is either inconclusive or confirms a release, Illinois EPA's DLPC will require Phase II of the plan be implemented. The final report of Phase II will be required to document the extent, rate and type of contamination at the site. The results of both phases of the investigation must be of sufficient content and quality to support and develop a corrective action program if one is deemed necessary by Illinois EPA's DLPC. Illinois EPA's DLPC will provide comments on all final draft reports. The final reports must adequately address these comments. The following table summarizes the implementation and reporting schedule to be followed by the Permittee.

RFI IMPLEMENTATION SCHEDULE

Facility Action	Due Date
Submission of RFI Phase I Workplan	Within 90 days after effective date of the permit
Completion of RFI Phase I investigation and submission of Phase I Report and Summary	Within 6 months after approval by Illinois EPA's DLPC of Phase I Workplan
Submission of RFI Phase II Workplan	Within 60 days after notification of the need of Phase II by Illinois EPA's DLPC
Completion of RFI Phase II investigation and submission of Phase II Report and Summary	To be negotiated with Illinois EPA's DLPC during review of Phase II workplan

LPC #0311860003
Part B Log No. 113R
Page D-21 of D-21

Quarterly Progress Reports

Due to the
Illinois EPA's DLPC by:

April 15
July 15
October 15
January 15 of each year

Submission of Implementation of Interim
Measures Report

Within 30 days from the
date interim measures were
determined to be necessary

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ATTACHMENT -- E

Closure Cost Estimate
for
Hazardous Waste Storage Area

ILD07442938

LPC #0311860003

Part B Log #113R

ATTACHMENT -- E

(Closure Cost Estimate 2003)

Closure Cost for Hazardous Waste Storage Area, capacity 27,500 gallons at Detrex Corporation
(Melrose Park Facility).

Closure Cost	\$39,980
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ATTACHMENT -- F

Approved Permit Application

ILD074424938

LPC #0311860003

Part B Log 113R

SECTION	APPROVED SECTION EDITION
Part A Application	Section A, 10-9-02
Facility Plan	Section A, Rev. 0
Secondary Containment Cert.	Section A, Rev. 0
Ill Prof. Engineering Cert.	Section A, 1-23-03
Siting Exemption	Section A, Rev. 0
Notification & Mailing Lists	Section A, Rev. 0
General Description	Section B, Rev. 02-2 10/4/02
Topographical Map	Section B, Rev. 02-2 10/4/02
Facility Location	Section B, Rev. 02-2 10/4/02
Traffic Info	Section B, Rev. 02-2 10/4/02
Operating Record	Section B, Rev. 02-2 10/4/02
Maps	Section B, 11-15-02
Waste Characteristics	Section C, Rev. 03-1, 1/2/03
Process Information	Section D, Rev. 02-2, 10/4/02
Groundwater Monitoring	Section E, Rev. 02-1, 4/30/02
Procedures to Prevent Hazards	Section F, Rev. 02-2, 10/4/02
Contingency Plan	Section G, Rev. 03-1, 1/2/03
Personnel Training	Section H, Rev. 02-2, 10/4/02
Closure & Post-Closure Requir.	Section I, Rev. 02-1, 10/4/02

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Other Federal Laws

Section J. Rev. 02-2, 10/4/02

Certifications

Section K, Rev. 02-2, 10/4/02

Continuing Releases

Section L, Rev. 02-1, 4/30/02

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

217/524-3300

GEORGE H. RYAN, GOVERNOR

RENEE CIPRIANO, DIRECTOR

December 30, 2002

CERTIFIED MAIL

7002 2030 0001 1873 4196

Mr. David Craig
Detrex Corporation
P.O. Box 5111
Southfield MI 48086-5111

Re: 0311860003—Cook County
Detrex Corporation
Log B-113R
Administrative Record File

Dear Mr. Craig:

The Illinois Environmental Protection Agency has reviewed your application for renewal of the RCRA permit to construct, maintain and operate a waste management facility to store hazardous waste. The application was dated April 30, 2002 and received May 1, 2002 for the above referenced facility. A list of deficiencies identified during this second technical review is included in the attached Notice of deficiency (NOD).

Each of the deficiencies must be addressed before this Agency can complete the technical review of your permit application. Your response must be submitted in quadruplicate and postmarked no later than January 31, 2003. The response should be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for a proper review of this new information, **the location of the response to each deficiency should be identified in a list cross-referencing these items.** Each revised page or drawing must have the revision date identified on them for tracking purposes. Your response to the first NOD was not in proper format. Several of the deficiencies identified in the first NOD are repeated in this NOD because the information could not be found in your response. Failure to provide adequate information in a timely manner may result in denial of your RCRA Part B permit in accordance with Section 39(d) of the Illinois Environmental Protection Act.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency
Bureau of Land -- #33
Permit Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

USEPA

Page 2

If you have any additional questions in this matter, please contact Mary Riegle of my staff at 217/524-3329.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joyce L. Munie", written over a horizontal line.

Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

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Enclosure

cc: Greg Czajkowski
Robert M. Currie, Detrex Corporation

Attachment 1

Detrex Corporation
LPC# 0311860003
RCRA Log # B-113R
Notice of Deficiency Comments

A.1.2 Permits or Construction Approvals: 702.123

The RCRA permit application must include a list of all permits or construction approvals received or applied for under any of the following programs: RCRA, UIC program under SDWA and 704, NPDES program under the CWA and 309, PSD program, and Title 5 permits under the CAA, Nonattainment program under the CAA, NESHAPS pre-construction approval under the CAA, open dumping permits under MPRSA, dredge or fill permits under Section 404 of the CWA, other relevant environmental permits including Illinois permits.

Detrex indicated in the response to the first NOD that Detrex Corporation does not have any other permits associated with the operation of this facility. Detrex has a state operating permit which allows the acceptance of non-hazardous waste. Please amend your application accordingly.

A.2.3 Technical Information Certification: 703.182, Illinois Professional Engineering Act

Certain technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a qualified Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1. In a submittal dated May 20, 2002 you indicate that you are in the process of locating a Professional Engineer in the State of Illinois. Please submit a certification for all technical data.

This issue has still not been resolved since the last NOD was issued.

A.4 Public Participation

No information was submitted in your application relating to public participation. A copy of the Agency's decision guide is attached to this NOD. Please refer to the public participation section of the decision guide and submit all the required information.

This issue has still not been resolved since the last NOD was issued.

C.1.1 General Chemical Information and Analyses

Please include in the permit application the following information for each hazardous waste stored at the facility:

- Laboratory analysis no more than five years old, signed and dated, that details the chemical and physical analysis of a representative sample of the hazardous wastes managed at the site (i.e., provide a typical analysis of an ignitable, corrosive, reactive and TCLP toxic waste, if managed)
- A table summarizing the analytical results for all the wastes managed in the RCRA units

This issue has still not been resolved since the last NOD was issued.

C.1.3 Land Disposal Restrictions: 703, 728

Identify all hazardous constituents present in the waste subject to treatment standards including underlying hazardous constituents if applicable (e.g., those hazardous constituents which make the waste characteristic or for which the waste is listed)

This issue has still not been resolved since the last NOD was issued.

C.2.3.1 Identify Sampling Devices and Methods. Your application provides methods for collecting samples in the QA/QC plan but does not reference a ASTM method as required. Please modify this section accordingly.

This issue has still not been resolved since the last NOD was issued.

G.1 Evaluation-Assessment of Potential Hazards Report: 703.183ItO, 703.183(g), 724.137, 724.150 through 724.156

Identify the maximum horizontal extent of the AEL concentration in the gas plume on a scale drawing of the area. Show the source, facility property line, roads and all receptors.

Indicate the duration of the release.

This issue has still not been resolved since the last NOD was issued.

G.1.3.1 Identify all constituents in Appendix H of 721 that are present in the wastes managed at the facility. Provide chemical and physical properties for these compounds. The information provided in Section C.1.2 of the application can be referenced.

G.1.4.2 Limitations. Identify and discuss the strengths and weaknesses of the model.

This issue has still not been resolved since the last NOD was issued.

G.1.4.3 Justify Assumptions. Identify the assumptions associated with the model in applying it to the situation at hand. Provide justifications for all assumptions used in the evaluation.

This issue has still not been resolved since the last NOD was issued.

G.2.10 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

G.2.10.1 Documentation of Agreements & Arrangements: For each emergency response entities identified in the Contingency Plan, provide written documentation off one of the following:

- An agreement was reached with the emergency response agency,
- An attempt to make an arrangement with the emergency response agencies was made, or
- The emergency response agency refused to enter into an arrangement with the facility.

In your response to NOD you indicate you would like to postpone obtaining acknowledgement agreements until the contingency plan is tentatively approved by the IEPA. At a minimum you must provide documentation that the emergency response entities are aware of and willing to provide the services identified as their responsibility in the contingency plan. Therefore, postponement is not appropriate.

G.2.10.2 Coordination Agreements: Describe the arrangements agreed to by the local police and fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services. The agreements must be sufficient to define the responsibilities of each entity in the event that the contingency plan is implemented.

In your response to NOD you indicate you would like to postpone obtaining acknowledgement agreements until the contingency plan is tentatively approved by the IEPA. As indicated in G.2.10.2 above, postponement is not acceptable to Ill. EPA.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

217/524-3300

August 21, 2002

Certified Mail

7001 2510 0002 5280 1893

Mr. David Craig
Detrex Corporation
P.O. Box 5111
Southfield MI 48086-5111

Re: 0311860003 -- Cook County
Detrex Corporation
Log B-113R
Administrative Record File

Dear Mr. Snowden:

The Illinois Environmental Protection Agency has reviewed your application for renewal of the RCRA permit to construct, maintain and operate a waste management facility to store hazardous waste. The application was dated April 30, 2002 and received May 1, 2002 for the above referenced facility. A list of deficiencies identified during this initial technical review is included in the attached Notice of deficiency (NOD).

Each of the deficiencies must be addressed before this Agency can complete the technical review of your permit application. Your response must be submitted in quadruplicate and postmarked no later than September 19, 2002. The response should be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency
Bureau of Land -- #33
Permit Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

GEORGE H. RYAN, GOVERNOR

such as copies of required permits or letters from Federal Agencies stating the facility is in compliance with the Federal law in question. Your application provides a statement that says Detrex is in compliance with these federal laws. This is not acceptable; documentation should be submitted.

The following information must be submitted for all units as specified below:

ATTACHMENT BB

AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS **35 IL. ADM. CODE 724, SUBPART BB**

This attachment is to be used for equipment (pumps, compressors, pressure relief devices, sampling connecting systems, open-ended valves or lines, valves in gas/vapor service or in light liquid service) that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

- a. Units that are subject to the permitting requirements of 35 IAC 703; or
- b. Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of 35 IAC 703.

NOTE: The requirements of 35 IAC 724.952 through 35 IAC 724.965 apply to equipment associated with hazardous waste recycling units previously exempt under 35 IAC 721.106(c)(1). Other exemptions under 35 IAC 721.104, 722.134, and 724.101(g) are not affected by these requirements.

BB.1 Applicability of Subpart BB Requirements: 724.950, 724.963(d), (g), (h)

The application must include a determination for each piece of equipment as to whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight. The determination must be made by direct measurement methods or by applying knowledge of the waste.

BB.1.1 Direct Measurement Methods: For the hazardous waste that contacts or is contained in each piece of affected equipment include the results of waste analysis for the organic concentrations using:

BB.1.1.1 ASTM Methods D-2267-88, E-169-87, E-168-88, E-260-85, or

BB.1.1.2 Method 9060 or 8260 of SW-846.

- BB.1.2 Knowledge:** The application must document the organic concentration by including:
- BB.1.2.1. Production process information documenting that no organic compounds are used;
 - BB.1.2.2 Information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent; or
 - BB.1.2.3 Prior specification analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.
- BB.1.3 Samples:** Samples used in determining the percent organic content must be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment. The application must describe the sampling procedures and document why the process conditions during sampling were expected to cause the maximum organic concentrations.
- BB.1.4 Vapor Pressure:** To determine if pumps or valves are in light liquid service, the vapor pressures of constituents must be obtained from standard reference texts or be determined by ASTM method D-2879.
- BB.1.5 Reanalysis:** If an applicant wishes to revise a previous determination that a piece of equipment was subject to 724 Subpart BB, the waste must be reanalyzed by ASTM Methods D-2267-88, E-169-87, E-168-88, E-260-85, or SW-846 Methods 9060 or 8260. The application must include copies of the initial determination, and all revisions.
- BB.2 Exemptions From Subpart BB Requirements: 724.950(e), 264.1050(f)**
- BB.2.1 Vacuum Service:** Equipment that is in vacuum service is excluded from the requirements of BB.4 through BB.11 provided the identification number of each piece of excluded equipment is kept in a log in the operating record at the facility.
 - BB.2.2 300 Hours/Year:** Equipment that contains or contacts hazardous waste less than 300 hours per calendar year is exempt from the requirements of BB.4 through BB.11 provided the application includes documentation to justify this exemption.
- BB.3 Equipment Information: 703.211**

- BB.3.1 Description of Equipment:** The application must include the following information for each piece of equipment subject to the requirements of Subpart BB (some of this information may be provide in a table format):
- BB.3.1.1 Equipment Identification. Provide the individual identification number for each piece of regulated equipment and the hazardous waste management unit in which it is located.
- BB.3.1.2 Equipment Location. Identify the hazardous waste management units on a scale drawing of the facility. Identify the regulated equipment on P&ID and scale drawing(s) of the unit.
- BB.3.1.3 Type of Equipment. Indicate if the piece of equipment is a pump, valve, etc. Provide detailed engineering drawings (including cross sections) of each piece of equipment and the control equipment associated with it.
- BB.3.1.4 Percent Organics. Identify the percent by weight of total organics in the hazardous wastestream at the equipment.
- BB.3.1.5 Waste State: Identify if the hazardous waste at the equipment exists as a gas/vapor or a liquid.
- BB.3.1.6 Method of Compliance. Identify how the requirements of Subpart BB are met at each piece of equipment (e.g. ☐ Monthly leak detection and repair☐ , ☐ equipped with dual mechanical seals☐ , etc.).
- BB.4 Pumps in Light Liquid Service: 703.211, 724.952**
- BB.4.1 Pumps Exempt from the Leak Detection Monitoring:** The following pumps are exempt from certain leak detection monitoring requirements provided the application documents how the following requirements are met:
- BB.4.1.1 Dual Mechanical Seal System. A pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from BB.4.2, provided the following requirements are met:
- BB.4.1.1.1 The description of the dual mechanical seal system includes detailed engineering drawings (including cross sections) of the pump and seal system, the barrier fluid pressure, stuffing box pressure, the design and operation of the seal system and the system meets the requirements of 724.952(d)(1).
- BB.4.1.1.2 An analysis of the barrier fluid system is provided that documents the fluid is not a hazardous waste with organic concentrations 10 percent or greater by weight.

- BB.4.1.1.3 The barrier fluid system is equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. The application must include a detailed engineering description (including drawings) of the sensor design and operation.
- BB.4.1.1.4 Each pump is visually inspected each week for indications of liquids dripping from the pump seals.
- BB.4.1.1.5 The sensor is checked daily or installed with an audible alarm and the requirements of 724.952(d)(5) are met.
- BB.4.1.1.6 The procedures specified at 724.952(d)(6) are followed if any leak is detected.
- BB.4.1.2 No Detectable Emissions. A Pump designed for no detectable emissions is exempt from the requirements of 724.952(a), (c), and (d) if the following requirements are met:
- BB.4.1.2.1 The application documents that the pump meets the requirements of 724.964(g)(2).
- BB.4.1.2.2 The description of the pump includes detailed engineering drawings (including cross sections) that show that the pump does not have an externally actuated shaft that penetrates the pump housing.
- BB.4.1.2.3 The description of the pump's operation specifies how it will be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).
- BB.4.1.2.4 Identify the type of instrument(s) used (OVA, FID, PID, etc.) to demonstrate no detectable emissions, and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.
- BB.4.1.2.5 Test results are provided that document the pump was tested for compliance with 724.952(e)(2) initially upon designation, and annually thereafter (or as specified in the permit).
- BB.4.1.3 Closed Vent System. A pump equipped with a closed vent system capable of capturing and transporting any leakage from the seal(s) to a control device is exempt from the requirements of 724.952(a) through (e) provided it meets the requirements for control devices and closed vent systems at 724.960, 724.933, and 703.211(b), (c), and (d).

- BB.4.2 Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each pump in light liquid service to detect leaks. The following requirements must be addressed:
- BB.4.2.1 Visual Inspection: The application must describe how the operator will visually inspect each affected pump weekly for indications of liquids dripping from the seal.
- BB.4.2.2 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.
- BB.4.2.3 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must address all of the requirements of 724.963(b)(3) and (4).
- BB.4.2.4 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. Each pump must be monitored monthly.
- BB.4.3 Repair Program:** The application must include a repair plan that identifies how the requirements of 724.952(c) will be implemented when a leak is detected.
- BB.4.4 Documentation of Compliance.** Documentation that demonstrates compliance with the equipment standards of 724.952 must be provided as part of the application. This documentation must contain the records required by 724.964.
- BB.5 Compressors: 724.953**
- Indicate each compressor that is equipped with a seal system that includes a barrier fluid system that prevents leakage of total organic emissions to the atmosphere.
- BB.5.1 Exceptions to Compressor Standards:** Compressors are exempt from certain requirements of 724.953 provided the application documents how the following requirements are met:

BB.5.1.1 Closed Vent System. Except as provided in 724.953(i), a compressor is exempt from the requirements of 724.953(a) and (b) if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal(s) to a control device meets the requirements for control devices and closed vent systems at 724.960.

BB.5.1.2 No Detectable Emissions. A compressor that is designed for no detectable emissions is exempt from the requirements of 724.953(a) through (h) if the following requirements are met:

BB.5.1.2.1 The application documents that the pump meets the requirements of 724.964(g)(2).

BB.5.1.2.2 The description of the pump includes detailed engineering drawings (including cross sections) that show that the pump does not have an externally actuated shaft that penetrates the pump housing.

BB.5.1.2.3 The application includes documentation demonstrating that the compressor operates with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).

BB.5.1.2.4 Identify the type of instrument(s) used (OVA, FID, PID, etc.) to demonstrate no detectable emissions, and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

BB.5.1.2.5 The application includes test results which document that the compressor was tested for compliance with 724.953(i)(1) initially upon designation, and annually thereafter (or as specified in the permit).

BB.5.2 Compressor Seal System Requirements: The application must include the following information:

BB.5.2.1 Description of System. A description of the compressor seal system that includes detailed engineering drawings (including cross sections) of the compressor and seal system, the barrier fluid pressure, stuffing box pressure, and the design and operation of the seal system.

BB.5.2.2 Barrier Fluid. An analysis of the barrier fluid system that documents the fluid is not a hazardous waste with organic concentrations 10 percent or greater by weight.

- BB.5.2.3 Barrier Fluid System. A description of the barrier fluid system that describes how it is designed and operated to meet the requirements of 724.953(b).
- BB.5.2.4 Fluid System Sensor. A description of the barrier fluid system's sensor that describes how it is designed, operated, if it has an audible alarm, and how it will detect failure of the seal system, barrier fluid or both.
- BB.5.2.5 Inspection of Sensor. An inspection plan for each barrier fluid system sensor as required in section 724.953(d).
- BB.5.2.6 System Failure. Criterion, based on design considerations and operating experience, that indicates failure of the seal system, the barrier fluid, or both.
- BB.5.2.7 Repairs. A description of the procedures followed if any leak is detected that meet the requirements of 724.953(g).
- BB.6 Pressure Relief Devices in Gas-vapor Service: 724.954**
- BB.6.1 Exceptions to Pressure Relief Device Standards:** Pressure relief devices are exempt from certain requirements of 724.954 provided the application documents how the following requirements are met:
- BB.6.1.1 Closed Vent System. A pressure relief device is exempt from the requirements of 724.954(a) and (b) if it is equipped with a closed vent system capable of capturing and transporting any leakage from the pressure relief device to a control device meets the requirements for control devices and closed vent systems at 724.960.
- BB.6.2 Pressure Relief Device Requirements:** The application must include a detailed description of how (except during pressure releases), each pressure relief device in gas vapor service must be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).
- BB.6.3 Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each pressure relief device in gas vapor service to detect leaks. All of the following requirements must be addressed:
- BB.6.3.1 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

- BB.6.3.2 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must address all of the requirements of 724.963(b)(3) and (4).
- BB.6.3.3 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. Specify the monitoring frequency.
- BB.6.2.4 Background Level. Describe how the background level is determined in accordance with Reference Method 21.
- BB.6.2.5 Determining Compliance. Provide the procedures and calculations that show how the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- BB.6.2.6 Actions Following Pressure Release. Describe the actions that will be taken at the facility following a pressure release to meet the requirements of 724.954(b).
- BB.7 Sampling Connecting Systems: 724.955**
- BB.7.1 Exceptions to Sampling Connecting Standards:** In-situ sampling systems are exempt from the requirements of 724.955(a) and (b).
- BB.7.2 Sampling Connection Requirements:** Each sampling connection system is equipped with a closed purge system or closed-vent system. The application must describe how all closed purge systems and closed-vent systems will meet one of the following requirements:
- BB.7.2.1 Return Purged Waste. The system must return the purged hazardous waste stream directly to the hazardous waste management process line with no detectable emissions to atmosphere.
- BB.7.2.2 Recycle Purged Waste. The system must collect and recycle the purged hazardous waste stream with no detectable emissions to atmosphere.
- BB.7.2.3 Control Device. The system must be designed and operated to capture and transport all the purged hazardous wastestream to a control device that meets the requirements of Section 724.960.
- BB.7.3 Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each

sampling connection system to detect leaks. All of the following requirements must be addressed.

BB.7.3.1 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

BB.7.3.2 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must address all of the requirements of 724.963(b)(3) and (4).

BB.7.3.3 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. Specify the monitoring frequency.

BB.8 Open-ended Valves or Lines: 724.956

BB.8.1 **Open-Ended Valves or Lines Requirements:** Each open-ended valve or line must be equipped with a cap, blind flange, plug, or a second valve. The application must include detailed descriptions and drawings of all affected open-ended valves and lines and how they meet the requirements of 724.956.

BB.8.1.1 Design. The application must describe the design of all open-ended valves or lines.

BB.8.1.2 Operation. The application must describe the operation of all open-ended valves or lines.

BB.9 Valves in Gas-vapor or Light Liquid Service: 724.957

Each valve in gas-vapor or light liquid service must be monitored monthly to detect leaks and must comply with the requirements of 724.957(b) through (e) except as provided in 724.957(f), (g), (h), 724.961, and 724.962.

BB.9.1 **Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each valve in gas-vapor or light liquid service to detect leaks. All of the following requirements must be addressed:

- BB.9.1.1 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.
- BB.9.1.2 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must address all of the requirements of 724.963(b)(3) and (4).
- BB.9.1.3 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. The monitoring frequency must be monthly or as specified in 724.957(c).
- BB.9.2 Repair Program:** The application must include a repair plan that identifies how the requirements of 724.957(d) and (e) will be implemented when a leak is detected.
- BB.9.3 Exceptions to 724.957 Standards:** A valve in gas-vapor or light liquid service is exempt from the monitoring requirements of 724.957(a) provided the application documents how the following requirements are met:
- BB.9.3.1 No Detectable Emissions. A valve in gas-vapor or light liquid service that is designed for no detectable emissions is exempt from the requirements of 724.957(a) if the following requirements are met:
- BB.9.3.1.1 The application documents that it meets the requirements of 724.964(g)(2).
- BB.9.3.1.2 The application includes a detailed description and engineering drawings (including cross sections) of the valve that show that it does not have an external actuating mechanism in contact with the hazardous waste stream.
- BB.9.3.1.3 The application includes documentation demonstrating that the valve operates with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).
- BB.9.3.1.4 The type of instrument(s) used (OVA, FID, PID, etc.) to demonstrate no detectable emissions is identified, and it is documented that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

BB.9.3.1.5 The application includes test results which document that the valve was tested for compliance with 724.957(f)(2) initially upon designation, and annually thereafter (or as specified in the permit).

BB.9.3.2 Unsafe to Monitor Valve. A valve in gas-vapor or light liquid service that is designated as unsafe to monitor is exempt from the requirements of 724.957(a) if the following requirements are met:

BB.9.3.2.1 The application includes a detailed explanation of how the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements.

BB.9.3.2.2 The application includes a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

BB.9.3.3 Difficult to Monitor Valve A valve in gas-vapor or light liquid service that is designated as a difficult to monitor valve is exempt from the requirements of 724.957(a) if the following requirements are met:

BB.9.3.3.1 The application states that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

BB.9.3.3.2 Documentation is provided which indicates that the unit within which the valve is located was operated before June 21, 1990.

BB.9.3.3.3 The application includes a written plan that requires monitoring of the valve at least once per calendar year.

BB.10 Pumps, Valves, Pressure Relief Devices and Other Connectors: 724.958

The application must document that all pumps and valves in heavy liquid service, pressure relief devices in light liquid service and flanges and other connectors will be monitored within 5 days if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

BB.10.1 **Exceptions to Connectors Standards:** Any connector that is ceramic or ceramic-lined (e.g. porcelain, glass, or glass-lined) is exempt from the monitoring requirements of this subsection and the recordkeeping requirements of 35 Ill. Adm. Code 724.964.

BB.10.2 **Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each valve in gas-vapor or light liquid service to detect leaks. All of the following requirements must be addressed:

- BB.13.1 The application must include a detailed description of the information that is documented in the operating record to comply with the recordkeeping and reporting requirements of this Subpart.
- BB.13.2 Operating Record. Describe how the operating record is organized; including a copy of the table of contents, copies of log sheets, etc.
- BB.14 Equipment Identification: 729.950(d)
- BB.14.1 The application must document that each piece of equipment to which this Subpart applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

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Attachment 1

Detrex Corporation
LPC# 0311860003
RCRA Log # B-113R
Notice of Deficiency Comments

A.1.2 Permits or Construction Approvals: 702.123

The RCRA permit application must include a list of all permits or construction approvals received or applied for under any of the following programs: RCRA, UIC program under SDWA and 704, NPDES program under the CWA and 309, PSD program, and Title 5 permits under the CAA, Nonattainment program under the CAA, NESHAPS pre-construction approval under the CAA, open dumping permits under MPRSA, dredge or fill permits under Section 404 of the CWA, other relevant environmental permits including Illinois permits.

A.2.1 Siting Certification: 703.184(f), Environmental Protection Act: Section 39(c)&39.2

All pollution control facilities must demonstrate that they have complied with the requirements of Section 39.2 of the Environmental Protection Act. In a submittal dated 6/25/02 you indicate that you are in the process of getting a copy of your siting approval. Please include in your response to this NOD either a demonstration that you have received approval from the local county or municipality or a demonstration that you meet one of the siting exemptions found in Section 39(c).

A.2.3 Technical Information Certification: 703.182, Illinois Professional Engineering Act

Certain technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a qualified Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1. In a submittal dated May 20, 2002 you indicate that you are in the process of locating a Professional Engineer in the State of Illinois. Please submit a certification for all technical including design drawings, specifications and engineering studies data.

A.4 Public Participation

No information was submitted in your application relating to public participation. A copy of the Agency's decision guide is attached to this NOD. Please refer to the public participation section of the decision guide and submit all the required information.

B.1 General Description: 702.123, 703.183(a), 703.183(n), 703.183(s)

B.1.1 Operation of Facility: Please identify the types of industry served.

B.1.2 Process Flow Diagram: Provide a process flow diagram that describes how each category of waste will move through the facility.

B.2 Topographic Map :702.123(g), 703.183(r), 703.184, 703.185(c), 703.185(d), 724.195, 724.197

B.2.1.1 Facility + 1 mile: Provide a topographical map that extends at least 1 mile beyond the property boundaries. This map must depict the legal boundaries of the facility. Attachment B-3 contains a topographical map that extends at least 1 mile from the Detrex boundary but it does not depict the legal boundaries of the facility. Please submit a map meeting these requirements.

B.2.1.2 Facility + 1000 feet: Provide a topographic map that show the facility at a distance of 1,000 feet outside the facility's property line, at a scale of 1 inch equal to not more than 200 feet. The scale is much larger on the topographic map provided.

Please provide maps with the following information:

1. Surrounding land use. The application states that surrounding land use is described on map B-4. The legend on B-4 indicates different surrounding land uses but the map is such a poor copy that it is not clear which areas are what. Please provide a better copy or a different map.
2. Sewers: storm and sanitary. The application indicates that this information can be found on map B-8. This map shows sewers located in the city of Melrose Park and not the facility. Please provide a more appropriate map.
3. Storm drains. Please provide a map indicating storm drains at the facility.
4. Surface waters including intermittent streams. The application indicates that the map in B-3 satisfies this requirement. The map in B-3 has too large of a scale to see any detail of the area. Please provide a more appropriate map. The contours should be sufficient to show surface water flow around facility unit operations.

B.4 Traffic Information: 703.183(j)

Please include the following hazardous waste traffic-related information:

- Traffic patterns on site. The application states that this information can be found in map B-7. There are no traffic patterns indicated on this drawing.
- Estimated volumes, including number and types of vehicles;
- Traffic control signs, signals and procedures.

B.5 Operating Record:724.173

B.5.1 Contents of Operating Record: Please modify the application to include procedures to record the following information about the facility in the operating as it becomes available:

- The location and quantity of each hazardous waste managed.
- Notices to generators per 724.112(b)
- Annual certification, by permittee, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste generated.
- Records of each shipment of hazardous waste placed in a land disposal unit under an extension of the effective dates of the LDRs.
- A copy of the notice and the certification, and demonstration required of the generator by 728.107 or 728.108.

C.1.1 General Chemical Information and Analyses

Please include in the permit application the following information for each hazardous waste stored at the facility:

- Laboratory analysis no more than five years old, signed and dated, that details the chemical and physical analysis of a representative sample of the hazardous wastes managed at the site (i.e., provide a typical analysis of an ignitable, corrosive, reactive and TCLP toxic waste, if managed)
- A table summarizing the analytical results for all the wastes managed in the RCRA units and
- Identify if dioxin containing waste, acutely toxic wastes and wastes containing free liquids as determined by the Paint Filter Liquids Test, Method 9095, in USEPA's publication SW-846 "Test Methods for Evaluating Solid Waste" (3rd edition and most recent finalized updates) will be managed.

C.1.2 Physical Properties and Toxicity Information: 703.183(b), 703.188, 724.156(c)

Please refer to the decision guide and provide the requested information in this section.

C.1.3 Land Disposal Restrictions: 703, 728

Please refer to the decision guide and provide the requested information in this section.

C.2.1 Parameters and Rationale: 724.113(b)(1)

Section C-2b(3) of the application states that Detrex will perform pH testing at their discretion. Please modify this section to indicate that Ph testing will be conducted on waste received for storage except labeled containers in lab packs or provide adequate justification why pH testing is not necessary.

C.2.2 Test Methods: 724.113(b)(2), 720.121

C.2.3.1 Identify Sampling Devices and Methods. Your application provides methods for collecting samples in the QA/QC plan but does not reference a ASTM method as required. Please modify this section accordingly.

C.2.5 Additional Requirements for Wastes Generated Off-Site: 724.113(c)

C.2.5.1 Pre-acceptance Procedures: Identify regulatory (permit) limitations and operational limitations on the types of wastes which can not be received at the facility.

C.2.5.2
and

C.2.5.3 Identify how much of a discrepancy will be acceptable on each parameter before it is determined that the waste does not match the manifest.

C.2.5.2.2 Describe the waste receipt inspection procedures.

C.2.5.3.2 Identify the fingerprint parameters, or concentrations, which will trigger additional analysis and/or informational requirements from the generator.

D1 Containers

Page D-4 of the application states that there are additional areas at the facility used for product storage and non-hazardous waste storage. Please identify these area on a drawing. Please indicate if the non-hazardous waste is accepted from off-site.

Page D-7 indicates that ramps will be constructed in the container storage area. Are these ramps already present or is this a modification to the existing storage area?

Page D-7 states that sealant will be applied. Is this a typographical error or will additional sealant be applied?

D.1.2 Container Management Practices: 703.188, 724.271, 724.273

D.1.2.1 General

Describe the container management practices used to ensure that hazardous waste containers are always kept closed during storage, except when adding, or removing or sampling waste.

Describe the tools and procedures used to open or close containers and any equipment used to add or remove waste from containers. All places where wastes are removed from, or added to containers must be clearly indicated on a scaled drawing.

Describe the procedures followed to transfer the contents from a container that is not in good condition into a container that is in good condition. Identify the area where this activity would take place.

D1.2.2 Movement of Containers

If more than one container is moved at a time, describe how the containers are stabilized (e.g. strapped together) prior to transport.

D1.2.3 Arrangement

The following must be shown on a scale drawing of the storage unit:

- The arrangement of containers when the storage area is at maximum capacity.
- The flow direction of spilled liquids in the container storage area.
- The location of secondary containment system and flow direction within the secondary containment. A plan view and cross section must be provided.

D1.3.2 Requirement for the Base or Liner to Contain Liquids: 724.275(b)(1)

Demonstrate the capacity of the base to contain liquids, including:

- An engineering evaluation of the base's structural integrity which demonstrates the base is strong enough to hold the weight of the containers and the equipment used to move containers (forklifts) without cracking. The evaluation must be certified by an Illinois Registered Professional Engineer.
- A demonstration that the secondary containment system is impermeable to, and compatible with the wastes stored in it. Concrete is considered impermeable to liquid hazardous waste. Therefore, it must be coated with a compatible sealer. The construction joints and water stops must also be made of materials that are impermeable to, and compatible with the wastes managed in the area. Provide copies of the manufacturer's specifications for the sealer and joint grouts and compare them with the wastes managed in each area.

F Inspection Requirements: 703.183(e), 724.115

F.2.2 Repair Log. A repair log is not addressed in your application. Please refer to the decision guide and submit the required information in this section.

F.3 Equipment Requirements: 703.183, 724.132, 724.133, 724.134, 724.135

F.3.4 Water for Fire Control: Provide a statement signed by an independent fire control professional, or the responsible fire department, certifying that the facility has water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic

sprinklers, or water spray systems. The document must include an original signature from the fire control professional or responsible fire department.

F.4 Prevention Procedures, Structures and Equipment: 703.183(h)

F.4.1.1 Describe the secondary containment capacity of all locations where loading/unloading operations will occur.

G.1 Evaluation-Assessment of Potential Hazards Report: 703.183ItO, 703.183(g), 724.137, 724.150 through 724.156

There is no information provided in the application for the requirements of this section. Please refer to the decision guide and submit the required information.

G.2 Contingency Plan: 703.183(t), 703.183(g), 724.150 through 724.156

G.2.1.2 Provide a scale drawing of the facility that shows the locations of all alarms.

G.2.1.3 There is no information provided in the application for the requirements of this section. Please refer to the decision guide and submit the required information.

G.2.1.4 There is no information provided in the application for the requirements of this section. Please refer to the decision guide and submit the required information.

G.2.1.5 There is no information provided in the application for the requirements of this section. Please refer to the decision guide and submit the required information.

G.2.1.6 There is no information provided in the application for the requirements of this section. Please refer to the decision guide and submit the required information.

G.2.1.7 Emergency Equipment: List and provide the quantity of all emergency equipment available at the facility for responding to a spill, leak, release, fire or explosion involving hazardous waste.

G.2.3 Assessment. This section relies heavily on the information collected in Section G.1. Since Detrex did not complete section G.1, this section will not be reviewed until it is updated. Please update this section using the information collected in section G.1.

G.2.4 Implementation: 724.151, 724.152(a)

G.2.4.1 When: Provide a Clear description of when the Contingency Plan will be implemented. Identify the minimum criteria (e.g. smallest release or fire) that will result in implementation of the Contingency Plan. Provide justification for this criteria based on the Evaluation of Potential Hazards performed in Section G.1.

Note: If no air modeling was performed, the Contingency Plan must be implemented whenever 1 gallon or more of waste is released (unless an adequate alternate method for assessment of air releases is provided).

G.2.6 Control Procedures: 724.152(a), 724.156

G.2.6.2 Monitoring: If the facility stops operations in response to a fire, explosion, or release, specify the equipment the EC will use to monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this is appropriate. Specify the equipment to be monitored, monitoring frequency, and necessary actions the EC must take if a leak or pressure buildup is detected.

G.2.10 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

G.2.10.1 Documentation of Agreements & Arrangements: For each emergency response entities identified in the Contingency Plan, provide written documentation off one of the following:

- An agreement was reached with the emergency response agency,
- An attempt to make an arrangement with the emergency response agencies was made, or
- The emergency response agency refused to enter into an arrangement with the facility.

G.2.10.2 Coordination Agreements: Describe the arrangements agreed to by the local police and fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services. The agreements must be sufficient to define the responsibilities of each entity in the event that the contingency plan is implemented.

G.2.10.6 Primary Evacuation Authority: Identify the agency (e.g. police department) that will be the primary authority in determining whether to evacuate an area.

I.1 Closure Plan: 703.183(m), 724.212

I.1.2 Maximum Operations and Waste Inventory: 724.212(b)(2) & (3)

Provide the dimensions and capacity of each HWMU that will exist during the active life of the facility.

I.1.4 Closure methods: 724.212(b)(3)

I.1.7 Closure of Container Storage Area: 724.278

The closure plan lists two separate options for closing the facility:

1. Transfer the waste out of containers into a truck
2. Transfer full containers off-site

Please modify your closure plan to include only 1 method of closure and base your cost estimate on that option. Note that the cost for the activity must include all labor equipment and utilities required to complete the tasks.

I.1.5 Removal and Decontamination Procedures: 724.212(b)(4)

The closure plan indicates steam cleaning of "the area". Please modify the plan to state that the secondary containment area will be steam cleaned and triple rinsed.

I.5 Closure Cost Estimate: 703.183(o), 724.242

I.5.3 Unit Costs. Please amend you closure cost estimate to include the costs for the following:

- costs to dispose of empty containers
- costs to dispose of contaminated and uncontaminated pallets
- costs for vacuum truck to collect rinse water
- cost for steam cleaning equipment
- cost for triple rinsing containers

Please provide a quote documenting the transportation/disposal costs for the bulked liquid, wash water and containerized solids/sludges.

I.6 Financial Assurance Mechanism for Closure: 703.183(o), 724.243

The financial assurance forms need must contain original signatures. Please submit new forms.

In accordance with 35 Ill. Adm. Code 724.243(c)(3) an original stand-by-trust fund must also be submitted.

I.9 Liability Requirements: 703.183(q), 724.247

The liability insurance forms must contain original signatures. Please submit new forms. Please note that the insurance expires 1/30/03.

J. Other Federal Laws: 703.183(t)

Provide information in the application that demonstrates compliance with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act. Provide all relevant documentation

such as copies of required permits or letters from Federal Agencies stating the facility is in compliance with the Federal law in question. Your application provides a statement that says Detrex is in compliance with these federal laws. This is not acceptable; documentation should be submitted.

The following information must be submitted for all units as specified below:

ATTACHMENT BB

AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS **35 IL. ADM. CODE 724, SUBPART BB**

This attachment is to be used for equipment (pumps, compressors, pressure relief devices, sampling connecting systems, open-ended valves or lines, valves in gas/vapor service or in light liquid service) that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

- a. Units that are subject to the permitting requirements of 35 IAC 703; or
- b. Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of 35 IAC 703.

NOTE: The requirements of 35 IAC 724.952 through 35 IAC 724.965 apply to equipment associated with hazardous waste recycling units previously exempt under 35 IAC 721.106(c)(1). Other exemptions under 35 IAC 721.104, 722.134, and 724.101(g) are not affected by these requirements.

BB.1 Applicability of Subpart BB Requirements: 724.950, 724.963(d), (g), (h)

The application must include a determination for each piece of equipment as to whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight. The determination must be made by direct measurement methods or by applying knowledge of the waste.

BB.1.1 Direct Measurement Methods: For the hazardous waste that contacts or is contained in each piece of affected equipment include the results of waste analysis for the organic concentrations using:

BB.1.1.1 ASTM Methods D-2267-88, E-169-87, E-168-88, E-260-85, or

BB.1.1.2 Method 9060 or 8260 of SW-846.

- BB.1.2 Knowledge:** The application must document the organic concentration by including:
- BB.1.2.1. Production process information documenting that no organic compounds are used;
 - BB.1.2.2 Information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent; or
 - BB.1.2.3 Prior specification analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.
- BB.1.3 Samples:** Samples used in determining the percent organic content must be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment. The application must describe the sampling procedures and document why the process conditions during sampling were expected to cause the maximum organic concentrations.
- BB.1.4 Vapor Pressure:** To determine if pumps or valves are in light liquid service, the vapor pressures of constituents must be obtained from standard reference texts or be determined by ASTM method D-2879.
- BB.1.5 Reanalysis:** If an applicant wishes to revise a previous determination that a piece of equipment was subject to 724 Subpart BB, the waste must be reanalyzed by ASTM Methods D-2267-88, E-169-87, E-168-88, E-260-85, or SW-846 Methods 9060 or 8260. The application must include copies of the initial determination, and all revisions.
- BB.2 Exemptions From Subpart BB Requirements: 724.950(e), 264.1050(f)**
- BB.2.1 Vacuum Service:** Equipment that is in vacuum service is excluded from the requirements of BB.4 through BB.11 provided the identification number of each piece of excluded equipment is kept in a log in the operating record at the facility.
 - BB.2.2 300 Hours/Year:** Equipment that contains or contacts hazardous waste less than 300 hours per calendar year is exempt from the requirements of BB.4 through BB.11 provided the application includes documentation to justify this exemption.
- BB.3 Equipment Information: 703.211**

- BB.3.1 Description of Equipment:** The application must include the following information for each piece of equipment subject to the requirements of Subpart BB (some of this information may be provide in a table format):
- BB.3.1.1 Equipment Identification. Provide the individual identification number for each piece of regulated equipment and the hazardous waste management unit in which it is located.
- BB.3.1.2 Equipment Location. Identify the hazardous waste management units on a scale drawing of the facility. Identify the regulated equipment on P&ID and scale drawing(s) of the unit.
- BB.3.1.3 Type of Equipment. Indicate if the piece of equipment is a pump, valve, etc. Provide detailed engineering drawings (including cross sections) of each piece of equipment and the control equipment associated with it.
- BB.3.1.4 Percent Organics. Identify the percent by weight of total organics in the hazardous wastestream at the equipment.
- BB.3.1.5 Waste State: Identify if the hazardous waste at the equipment exists as a gas/vapor or a liquid.
- BB.3.1.6 Method of Compliance. Identify how the requirements of Subpart BB are met at each piece of equipment (e.g. ☐ Monthly leak detection and repair☐ , ☐ equipped with dual mechanical seals☐ , etc.).
- BB.4 Pumps in Light Liquid Service: 703.211, 724.952**
- BB.4.1 Pumps Exempt from the Leak Detection Monitoring:** The following pumps are exempt from certain leak detection monitoring requirements provided the application documents how the following requirements are met:
- BB.4.1.1 Dual Mechanical Seal System. A pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from BB.4.2, provided the following requirements are met:
- BB.4.1.1.1 The description of the dual mechanical seal system includes detailed engineering drawings (including cross sections) of the pump and seal system, the barrier fluid pressure, stuffing box pressure, the design and operation of the seal system and the system meets the requirements of 724.952(d)(1).
- BB.4.1.1.2 An analysis of the barrier fluid system is provided that documents the fluid is not a hazardous waste with organic concentrations 10 percent or greater by weight.

- BB.4.1.1.3 The barrier fluid system is equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. The application must include a detailed engineering description (including drawings) of the sensor design and operation.
- BB.4.1.1.4 Each pump is visually inspected each week for indications of liquids dripping from the pump seals.
- BB.4.1.1.5 The sensor is checked daily or installed with an audible alarm and the requirements of 724.952(d)(5) are met.
- BB.4.1.1.6 The procedures specified at 724.952(d)(6) are followed if any leak is detected.
- BB.4.1.2 No Detectable Emissions. A Pump designed for no detectable emissions is exempt from the requirements of 724.952(a), (c), and (d) if the following requirements are met:
- BB.4.1.2.1 The application documents that the pump meets the requirements of 724.964(g)(2).
- BB.4.1.2.2 The description of the pump includes detailed engineering drawings (including cross sections) that show that the pump does not have an externally actuated shaft that penetrates the pump housing.
- BB.4.1.2.3 The description of the pump's operation specifies how it will be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).
- BB.4.1.2.4 Identify the type of instrument(s) used (OVA, FID, PID, etc.) to demonstrate no detectable emissions, and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.
- BB.4.1.2.5 Test results are provided that document the pump was tested for compliance with 724.952(e)(2) initially upon designation, and annually thereafter (or as specified in the permit).
- BB.4.1.3 Closed Vent System. A pump equipped with a closed vent system capable of capturing and transporting any leakage from the seal(s) to a control device is exempt from the requirements of 724.952(a) through (e) provided it meets the requirements for control devices and closed vent systems at 724.960, 724.933, and 703.211(b), (c), and (d).

BB.4.2 **Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each pump in light liquid service to detect leaks. The following requirements must be addressed:

BB.4.2.1 Visual Inspection: The application must describe how the operator will visually inspect each affected pump weekly for indications of liquids dripping from the seal.

BB.4.2.2 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

BB.4.2.3 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must addresses all of the requirements of 724.963(b)(3) and (4).

BB.4.2.4 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. Each pump must be monitored monthly.

BB.4.3 **Repair Program:** The application must include a repair plan that identifies how the requirements of 724.952(c) will be implemented when a leak is detected.

BB.4.4 **Documentation of Compliance.** Documentation that demonstrates compliance with the equipment standards of 724.952 must be provided as part of the application. This documentation must contain the records required by 724.964.

BB.5 **Compressors: 724.953**

Indicate each compressor that is equipped with a seal system that includes a barrier fluid system that prevents leakage of total organic emissions to the atmosphere.

BB.5.1 **Exceptions to Compressor Standards:** Compressors are exempt from certain requirements of 724.953 provided the application documents how the following requirements are met:

- BB.5.1.1 Closed Vent System. Except as provided in 724.953(i), a compressor is exempt from the requirements of 724.953(a) and (b) if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal(s) to a control device meets the requirements for control devices and closed vent systems at 724.960.
- BB.5.1.2 No Detectable Emissions. A compressor that is designed for no detectable emissions is exempt from the requirements of 724.953(a) through (h) if the following requirements are met:
- BB.5.1.2.1 The application documents that the pump meets the requirements of 724.964(g)(2).
- BB.5.1.2.2 The description of the pump includes detailed engineering drawings (including cross sections) that show that the pump does not have an externally actuated shaft that penetrates the pump housing.
- BB.5.1.2.3 The application includes documentation demonstrating that the compressor operates with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).
- BB.5.1.2.4 Identify the type of instrument(s) used (OVA, FID, PID, etc.) to demonstrate no detectable emissions, and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.
- BB.5.1.2.5 The application includes test results which document that the compressor was tested for compliance with 724.953(i)(1) initially upon designation, and annually thereafter (or as specified in the permit).
- BB.5.2 Compressor Seal System Requirements:** The application must include the following information:
- BB.5.2.1 Description of System. A description of the compressor seal system that includes detailed engineering drawings (including cross sections) of the compressor and seal system, the barrier fluid pressure, stuffing box pressure, and the design and operation of the seal system.
- BB.5.2.2 Barrier Fluid. An analysis of the barrier fluid system that documents the fluid is not a hazardous waste with organic concentrations 10 percent or greater by weight.

- BB.5.2.3 Barrier Fluid System. A description of the barrier fluid system that describes how it is designed and operated to meet the requirements of 724.953(b).
- BB.5.2.4 Fluid System Sensor. A description of the barrier fluid system's sensor that describes how it is designed, operated, if it has an audible alarm, and how it will detect failure of the seal system, barrier fluid or both.
- BB.5.2.5 Inspection of Sensor. An inspection plan for each barrier fluid system sensor as required in section 724.953(d).
- BB.5.2.6 System Failure. Criterion, based on design considerations and operating experience, that indicates failure of the seal system, the barrier fluid, or both.
- BB.5.2.7 Repairs. A description of the procedures followed if any leak is detected that meet the requirements of 724.953(g).

BB.6 Pressure Relief Devices in Gas-vapor Service: 724.954

- BB.6.1 Exceptions to Pressure Relief Device Standards:** Pressure relief devices are exempt from certain requirements of 724.954 provided the application documents how the following requirements are met:
- BB.6.1.1 Closed Vent System. A pressure relief device is exempt from the requirements of 724.954(a) and (b) if it is equipped with a closed vent system capable of capturing and transporting any leakage from the pressure relief device to a control device meets the requirements for control devices and closed vent systems at 724.960.
- BB.6.2 Pressure Relief Device Requirements:** The application must include a detailed description of how (except during pressure releases), each pressure relief device in gas vapor service must be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 724.963(c).
- BB.6.3 Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each pressure relief device in gas vapor service to detect leaks. All of the following requirements must be addressed:
- BB.6.3.1 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

- BB.6.3.2 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must address all of the requirements of 724.963(b)(3) and (4).
- BB.6.3.3 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. Specify the monitoring frequency.
- BB.6.2.4 Background Level. Describe how the background level is determined in accordance with Reference Method 21.
- BB.6.2.5 Determining Compliance. Provide the procedures and calculations that show how the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- BB.6.2.6 Actions Following Pressure Release. Describe the actions that will be taken at the facility following a pressure release to meet the requirements of 724.954(b).
- BB.7 Sampling Connecting Systems: 724.955**
- BB.7.1 Exceptions to Sampling Connecting Standards:** In-situ sampling systems are exempt from the requirements of 724.955(a) and (b).
- BB.7.2 Sampling Connection Requirements:** Each sampling connection system is equipped with a closed purge system or closed-vent system. The application must describe how all closed purge systems and closed-vent systems will meet one of the following requirements:
- BB.7.2.1 Return Purged Waste. The system must return the purged hazardous waste stream directly to the hazardous waste management process line with no detectable emissions to atmosphere.
- BB.7.2.2 Recycle Purged Waste. The system must collect and recycle the purged hazardous waste stream with no detectable emissions to atmosphere.
- BB.7.2.3 Control Device. The system must be designed and operated to capture and transport all the purged hazardous wastestream to a control device that meets the requirements of Section 724.960.
- BB.7.3 Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each

sampling connection system to detect leaks. All of the following requirements must be addressed.

BB.7.3.1 Instrument. Show that the detection instrument(s) used to perform the monitoring meets the performance criteria of Reference Method 21 in 40 CFR 60. Identify the type of instrument(s) that will be used (OVA, FID, PID, etc.), and document that the instrument is appropriate for the parameters it will be used to monitor. The application should discuss the response of the instrument to different groups of compounds, the power of the lamp used in PIDs, etc.

BB.7.3.2 Calibration Plan. Describe how the instrument will be calibrated before use on each day of use. The calibration plan must address all of the requirements of 724.963(b)(3) and (4).

BB.7.3.3 Monitoring Plan. Provide a monitoring plan that meets the requirements of Reference Method 21 in 40 CFR 60. Explain the procedures to be used to ensure the instrument probe is traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21. Specify the monitoring frequency.

BB.8 Open-ended Valves or Lines: 724.956

BB.8.1 **Open-Ended Valves or Lines Requirements:** Each open-ended valve or line must be equipped with a cap, blind flange, plug, or a second valve. The application must include detailed descriptions and drawings of all affected open-ended valves and lines and how they meet the requirements of 724.956.

BB.8.1.1 Design. The application must describe the design of all open-ended valves or lines.

BB.8.1.2 Operation. The application must describe the operation of all open-ended valves or lines.

BB.9 Valves in Gas-vapor or Light Liquid Service: 724.957

Each valve in gas-vapor or light liquid service must be monitored monthly to detect leaks and must comply with the requirements of 724.957(b) through (e) except as provided in 724.957(f), (g), (h), 724.961, and 724.962.

BB.9.1 **Leak Detection Monitoring Program:** The application must include a detailed description of the test methods and procedures that will be used to monitor each valve in gas-vapor or light liquid service to detect leaks. All of the following requirements must be addressed:

- BB.13.1 The application must include a detailed description of the information that is documented in the operating record to comply with the recordkeeping and reporting requirements of this Subpart.
- BB.13.2 Operating Record. Describe how the operating record is organized; including a copy of the table of contents, copies of log sheets, etc.
- BB.14 Equipment Identification: 729.950(d)
- BB.14.1 The application must document that each piece of equipment to which this Subpart applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

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USEPA

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

217/524-3300

July 2, 2002

CERTIFIED MAIL

7001 2510 0002 3280 3879

Mr. David Craig
Detrex Corporation
P.O. Box 5111
Southfield, Michigan 48086-5111

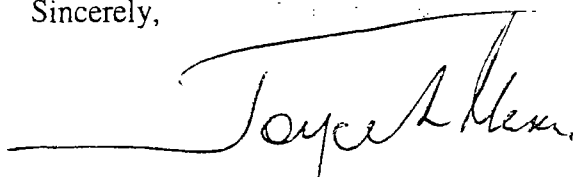
Re: 0311860003 -- Cook County
Detrex Corporation
Log B-113R
Administrative Record File

Dear Mr. Craig:

The Illinois Environmental Protection Agency ("Illinois EPA") has reviewed your application for renewal of the RCRA permit to operate a waste management facility to store hazardous waste. The application was dated April 30, 2002 and received May 1, 2002 for the above referenced facility. The Illinois EPA has determined that your Part B Permit Application is administratively complete and has begun a technical review of your application.

If you have any additional questions in this matter please contact Mary Riegle at 217/524-3329.

Sincerely,



Joyce L. Munie, P.E.
Manager, Permit Section
Bureau of Land

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cc: Greg Czajkowski, USEPA

GEORGE H. RYAN, GOVERNOR



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

USEPA

Mary A. Gade, Director
217/524-3300

2200 Churchill Road, Springfield, IL 62794-9276

February 17, 1993

Detrex Corporation
Attention: Mr. Daniel Anderson
Branch Manager
2537 LeMoyne Avenue
Melrose Park, Illinois 60160

Clauss Industrial District
Attention: Mr. Richard R. Lareno
Managing Agent
21150 Prestwick Drive
Barrington, Illinois 60010

Re: 0311860003 -- Cook County
Detrex Corporation, Melrose Park Facility
ILD074424938
RCRA Permit Log No. 113-M-1
RCRA Part B -- Administrative Record

Gentlemen:

This letter is in response to the Class I permit modification dated January 12, 1993 submitted by Douglas A. Donnell of Mika, Meyers, Beckett and Jones for the above-referenced facility. The above-referenced modification requested revisions to the facility RCRA Part B Permit to allow the following:

1. Correction of a typographical error in the preliminary assessment analysis requirements.

The Agency has reviewed the information submitted and has determined that the modification proposed by Detrex is acceptable to the Agency. This determination is based upon a review of (1) the RCRA Part B permit issued to the Detrex facility (RCRA Part B Log No. 113), (2) 35 IAC Subtitle G, and (3) the information contained in your submittal. Operations of this facility must be in accordance with the approved RCRA Part B Permit issued to Detrex, and all subsequent modifications to this facility permit.

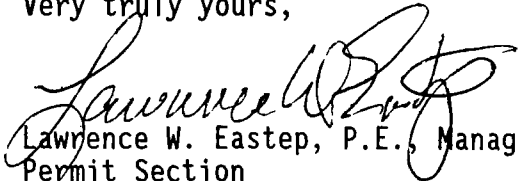
Enclosed you will find a revised RCRA Part B Permit. Condition B.4. of Section I has been modified per your request. This letter and the enclosed RCRA Part B Permit should replace the existing Part B Permit issued by IEPA.

In accordance with 35 IAC Section 703.281, Detrex must send a notice of the modification to all persons on the facility mailing list and the appropriate units of State and local government. A copy of the Agency's most recent mailing list for your facility has been enclosed. This notification must be made within ninety (90) calendar days after the change is put into effect.

Page 2

If you have any questions concerning this permit, please contact Amy L. Dragovich, P.E., at 217/524-3300.

Very truly yours,


Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

^{ALD}
LWE:ALD:lat/sp/1518q,2-3
_{scm}

Enclosures: Facility Mailing List
Permit

cc: USEPA Region V, George Hamper, w/attachments
Douglas Donnell, Mika, Meyers, Beckett and Jones, w/attachments
Bill Moore, Detrex, w/attachments
Issa Shamiyeh, Detrex, w/attachments



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

Operator

Detrex Corporation
Attention: Mr. Daniel Anderson
Branch Manager
2537 LeMoyne Avenue
Melrose Park, Illinois 60160

IEPA #0311860003 -- Cook County
USEPA ILD074424938
Detrex Corporation, Melrose Park Facility
RCRA Permit Log No. 113-M-1
RCRA -- Part B - Administrative Record

Owner

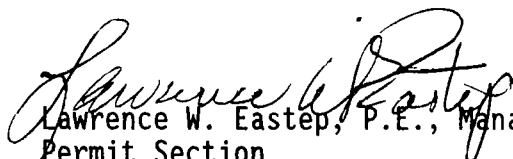
Clauss Industrial District
Attention: Mr. Richard R. Larena
Managing Agent
21150 Prestwick Drive
Barrington, Illinois 60010

Issue Date: September 30, 1992
Effective Date: November 4, 1992
Expiration Date: November 4, 2002
M-1 Modification Date: Feb. 17, 1993

A RCRA Part B Permit is hereby granted pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to the Detrex Corporation Melrose Park facility to construct/maintain and operate a waste management facility involved in the storage of hazardous waste. Detrex Corporation is located at 2537 LeMoyne Avenue, Melrose Park, Illinois.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 1/2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which is issued. This Permit contains 74 pages including attachments A through E.

If you have any questions regarding this Part B Permit, please contact Amy L. Dragovich, P.E., at 217/524-3300.


Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:ALD:lat/sp/1518q,1

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

DETREX CORPORATION (Operator)

And

CLAUSS INDUSTRIAL DISTRICT (Owner)

Melrose Park, Illinois

LPC No. 0311860003 -- Cook County

ILD074424938

Permit Log No. 113-M-1

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SECTION I CONTAINERS

A. SUMMARY

Containers of hazardous waste shall be stored in the hazardous waste storage area. The hazardous waste storage area is located indoors, in the northern half of the facility site. The hazardous waste storage area consists of a diked concrete base. The concrete shall be coated with a chemical resistant sealant. The hazardous waste storage area shall have a containment capacity of at least 8,221 gallons. This containment capacity is adequate to contain at least 10 percent of the volume of the hazardous waste and product containers to be stored within the secondary containment system. The maximum volume of hazardous waste to be stored in the hazardous waste storage area shall be 27,500 gallons, corresponding to a maximum of 500 55-gallon drums. A maximum of 300 55-gallon product and/or empty containers may also be stored within the secondary containment area. The only waste which may be stored in the hazardous waste storage area are hazardous wastes as identified in Table C-1 of the approved permit application.

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall be performed in the approved storage area shown as the hazardous waste container storage area on Attachment D-1 of the approved permit application.
2. The Permittee may only store the hazardous wastes identified in Table C-1 of the approved permit application in the container storage area. A maximum of 27,500 gallons of waste may be stored in the container storage area. The hazardous waste codes for those wastes are listed in Attachment A to this permit.
3. The Permittee is prohibited from storing waste (hazardous or non-hazardous) in the secondary containment area that is not identified in Condition B. 2. above.
4. Prior to the shipment of any drummed waste to Detrex from a new customer, a preliminary assessment of the waste shall be conducted at the generator's facility. This preliminary assessment shall include analysis of a waste sample for specific gravity, ignitability and a visual inspection of a full depth sample, using a coliwasa, to determine color and phases. This sampling shall be conducted by Detrex's personnel, unless the generator has conducted this analysis within the last year, the drum sealed and all results recorded in Detrex's operating record. A representative sample, obtained by Detrex personnel, shall then be sent to the laboratory

and analyzed for specific gravity, ignitability, organics and total metals unless the generator has conducted an analysis, which includes specific gravity, ignitability, organics and total metals of the waste stream within the last two years. The results of all laboratory analyses shall be recorded in Detrex's operating record and must also indicate who obtained the sample, the date of the sampling, and the sampling procedures used.

5. Detrex shall only accept wastes with a specific gravity greater than or equal to 0.80 and less than or equal to 1.68.
6. Prior to storing containers of waste in the hazardous waste container storage area, all containers shall be visually inspected and analyzed for specific gravity and the results compared to the one recorded during the preliminary assessment. In addition, all containers listed on a line item of a manifest shall be composited and analyzed for flammability (ASTM Method D4982-89). If the composite sample is flammable or even slightly flammable, all the drums within that composite shall be analyzed for flammability. Any drum that is flammable or even slightly flammable shall be analyzed for ignitability and the results compared to the one recorded during the preliminary assessment. If a discrepancy is found, the waste shall not be accepted at the facility prior to reanalysis. If the specific gravity, ignitability, and visual inspection is consistent with previous analysis, the containers may be stored at the facility.
7. Analysis for organics shall include all of the hazardous constituents for the volatile organics identified in Table C-1 of the approved permit application and Attachment A to this permit.
8. Samples which will be tested for volatile organics shall not be composited because of the volatilization which may result from any compositing method.
9. Every five (5) years a sample from each waste stream from each customer shall be sent off-site to the laboratory for analysis of specific gravity, organics, ignitability, and total metals, unless the process generating the waste changes prior to that time. If the process generating the waste changes, the waste shall not be accepted at the facility prior to reanalysis.

- a. For existing customers on the effective date of this permit, the first such analysis shall be conducted as follows:
 1. If the generator or Detrex has conducted such an analysis within the last two (2) years prior to the effective date of this permit, then the next analysis shall be conducted not later than five (5) years from the date of such analysis.
 2. If the generator or Detrex has not conducted such an analysis as set forth above, and Detrex is storing the waste stream from the generator on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the effective date of this permit.
 3. If the generator or Detrex has not conducted such an analysis as set forth in Condition I.B.9.a.1 above and Detrex is not storing the waste stream from the customer on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the date of receipt of the first delivery of the waste stream from the generator following the effective date of this permit.
 - b. For new customers obtained after the effective date of this permit, such analysis shall be conducted within five (5) years after the preliminary assessment or within five (5) years of the analysis conducted by the generator, whichever is earlier.
10. Analysis for ignitability shall be conducted in accordance with ASTM D-93 or ASTM D-3228 (35 IAC Section 721.121 (a)(1)). Analysis for flammability shall be conducted in accordance with ASTM D4982-89.
 11. A coliwasa sampler shall be used to obtain a representative sample from each drum.
 12. A maximum of 300 55-gallon product and empty containers may be maintained within the secondary containment system. The containers shall only contain the hazardous constituents permitted for storage in the hazardous waste storage area and shall not contain materials that are incompatible with any waste or other materials stored nearby in other containers unless separated from the other material

and protected from them by means of a dike, berm, wall, or other devices. In addition, containers of ignitable and combustible (NFPA definition) product shall not be stored in the secondary containment area.

13. The frequency of duplicate, blank, and spiked samples shall be consistent with the latest edition of SW-846.

- C. CONDITION OF CONTAINERS -- If a container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste or product from this container to a container that is in good condition or manage the waste in accordance with the approved permit application.
- D. COMPATIBILITY OF WASTE WITH CONTAINERS -- The Permittee must use a container made of or lined with material which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.
- E. MANAGEMENT OF CONTAINERS -- The Permittee shall comply with the following management practices:
1. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must always be closed during storage, except when it is necessary to add or remove waste.
 2. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.
- F. INSPECTION

The Permittee shall inspect the container area weekly, in accordance with the inspection schedule, specified in Attachment D, to detect leaks and deterioration of containers and the containment system caused by corrosion or other factors. The containment system shall be repaired or recoated as soon as possible, if the inspection determines the concrete sealant has deteriorated. Detrex shall perform a complete inspection of the concrete sealant yearly and perform annual maintenance to insure the integrity of the lining.

- G. CONTAINMENT -- The Permittee shall construct, operate, and maintain the containment system according to the design plans and operating specifications contained in the approved permit application.
- H. CLOSURE -- At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the containment system. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:
1. The Permittee shall notify the Agency's DLPC in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the storage area has been properly decontaminated. This plan must be approved by the Agency's DLPC in writing prior to being implemented. Agency review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from the Agency will approve and establish:
 - a. The sampling and decontamination plan;
 - b. What contaminants must be analyzed for;
 - c. Analytical requirements (SW-846 Methods should be utilized); and
 - d. The level at which decontamination or removal is considered complete.
 2. All sweepings, wash water and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721.
 3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
6. Within sixty (60) days after closure of the container storage area is complete, the Permittee shall submit certification to the Agency that the unit has been closed in accordance with the approved closure plan.

The closure certification forms in Attachment C to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until the Agency approves the closure certification for the unit. The Agency's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- c. Copies of the waste manifests.
- d. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.

- e. A chronological summary of closure activities and the cost involved.
 - f. Tests performed, methods and results.
 - g. Color photographs of closure activities which document conditions before, during and after closure.
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
9. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.

10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials in the same container.

Incompatible wastes or materials must not be placed in the same container to prevent reactions which:

- a. Generate extreme heat or pressure, fire or explosions, or violent reactions
- b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
- c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions
- d. Damage the structural integrity of the device or facility
- e. Through other like means, threaten human health or the environment.

The basic methods for preventing such reactions are to:

- a. Treat one or both of the incompatible wastes/materials to render them compatible prior to placing them in the container
 - b. Physically separate the incompatible wastes/materials in the containers so that it is not possible for the incompatible wastes/materials to come in contact with each other.
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
 3. The Permittee shall not store containers holding a hazardous waste or product that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments unless separated from the other material or protected from them by means of a dike, berm, wall, or other devices.

J. GENERAL CONSTRUCTION REQUIREMENTS

The container storage area may only be constructed in accordance with the approved permit application and the specifications for the sealant, approved by the Agency on April 28, 1992, subject to the following modifications:

1. Within thirty days after completing the installation of the sealant and prior to any container of waste being placed or stored in the container storage area, the Permittee shall submit to the Agency a certification from a qualified, registered professional engineer, demonstrating that the container storage area meets the requirements of 35 IAC 724.275(b). This certification document shall contain the information required in Attachment B and a statement that the base is free of cracks or gaps.
2. The Permittee may not store wastes until the construction certification is approved. The Agency shall review the certification described above to ensure the container storage area and its secondary containment meets the requirements of 35 IAC 724.292 and 724.293. The Agency will respond with any comments to this certification in writing within forty-five days from the receipt of this certification. If the Agency does not respond within forty-five days from the receipt of this certification, the permittee may consider the certification approved. The Agency review of this certification will be subject to the appeal provisions contained in Section 39(a) and 40(a) of the Illinois Environmental Protection Act.

K. CONTINGENCY PLAN - ADDITIONAL SPECIAL CONDITIONS

1. The Permittee shall implement the facility contingency plan contained in the approved permit application any time there is (1) a release of hazardous waste or hazardous constituents which could threaten human health or the environment, (2) a release of hazardous waste or hazardous constituents which is equal to or greater than the Reportable Quantity (RQ) listed in Table G-3 of the permit application, (3) a fire or explosion which involves hazardous waste or which occurs in areas where hazardous wastes are stored, or (4) a release of hazardous waste or hazardous waste constituents which, based on the air dispersion modeling results contained in the contingency plan, would be expected to result in exposure above an OSHA short term exposure limit to unprotected persons. (This would not apply to responding personnel who employ the proper personal protective equipment (PPE)).

2. The Permittee shall contact the local emergency response entities as soon as possible after implementation of the contingency plan:
 - a. The entities which must be notified include:
 1. Melrose Park Fire Department
 2. Melrose Park Police Department
 3. Local ESDA Coordinator
 - b. The information which must be initially relayed to each entity includes:
 1. The type of emergency (release, fire or explosion);
 2. The type of wastes or product involved in the emergency and the approximate quantity involved;
 3. An initial assessment of the conditions at the site;
 - c. If the Permittee is able to properly respond to the emergency without any aid from the entities identified in Condition 2.a above, the Permittee shall notify each of these entities that the emergency situation no longer exists once all required emergency response and cleanup activities have been completed. This condition does not preclude the need to initially notify the entities in 2.a above.
3. Within 60 days of the effective date of this permit, the Permittee shall demonstrate to the Agency that the following information has been provided to the local fire department, the local police department and all other agencies identified in 35 IAC 724.153(b) (Note that this information must be provided to these entities to ensure the requirements of 35 IAC 724.137 are met):
 - a. A list of all hazardous wastes to be managed at the facility (generic name), including the EPA hazardous waste number;
 - b. A scaled drawing showing the location of all hazardous waste management units at the facility and all other areas where hazardous waste is handled at the facility (such as loading/unloading areas, etc.). This scaled drawing must also identify the entrances to the facility, roads within the facility and possible evacuation routes;

- c. A description of the types of hazardous waste and products managed at each hazardous waste management unit at the facility;
- d. A description of the procedures used to handle hazardous waste at the facility;
- e. An estimate of the quantity of the various types of hazardous wastes which may be present at the facility. An estimate of the typical inventory of hazardous wastes at the facility must also be included;
- f. The following information regarding the properties of the hazardous wastes managed at the facility and the products to be stored in the hazardous waste secondary containment system:

Name
USEPA Hazardous Waste No.
IDLH
TLVs (TLV-TWA, TLV-STEL, TLV-C)
Vapor Pressure at 68 F (20 C)
NFPA Designation (flammable or combustible)
Material Safety Data Sheets
Other appropriate characteristics (such as
reactive class, etc.) USDOT classification.

- g. An identification of the products of incomplete combustion associated with the hazardous wastes managed at the facility. This shall include products to be stored in the hazardous waste secondary containment system.
4. Within 60 days of the effective date of this permit, the Permittee shall provide documentation to the Agency that the agreements and arrangements identified below have been made. Where necessary, documentation must be provided that any agency identified in 35 IAC 724.153(b) declined to enter into an agreement or arrangement. The specific arrangements and agreements which must be made include:
- a. Arrangements to familiarize the local police department, local fire departments and other local emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes.

- b. Agreements designating primary emergency authority to a specific police department and a specific fire department, where more than one police department and fire department might respond to an emergency. Agreements should also be made with the other surrounding police and fire departments to provide support to the primary emergency authorities;
- c. Agreements with state emergency response teams, emergency response contractors and equipment suppliers;
- d. Agreements to familiarize local hospitals with the properties of the hazardous wastes handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.
- e. Arrangements to identify a single local emergency response agency as the primary agency which will coordinate activities required by these agencies during an emergency at the facility.

The facility should also attempt to develop emergency plans and coordination agreements with the state and local emergency entities identified above. The detail of the arrangements made with the local and state emergency entities will be dependent upon the types of wastes handled at the facility and the potential need for the services of the various entities.

- 5. The Permittee shall review all components of the contingency plan with the local emergency response entities at least once every twelve months. Copies of the meeting notes and list of attendees shall be placed in the facility's operating record and be available to the Agency for review upon verbal or written request.
- 6. The Permittee shall modify the contingency plan to describe in detail the possible hazards to human health or the environment that may result from any hazardous waste (and products to be stored in the hazardous waste secondary containment system) related emergency (release, fire, or explosion). This information is necessary for the emergency coordinator to make a proper assessment of the emergency as required by 35 IAC 724.156(c) and (d). Specifically, the contingency plan must describe the hazards associated with releases and possible fires involving various hazardous wastes (and products to be stored in the hazardous waste secondary containment system) managed at the facility and the real impacts of such emergencies. Information which must be incorporated into the contingency plan includes:
 - a. The information identified in Condition 3 above.

- b. An evaluation of the hazards associated with a release or possible fire involving the various hazardous wastes which may be managed at the facility.
- c. An evaluation of the area which may potentially be impacted during a release or possible fire involving the various hazardous wastes (and products to be stored in the hazardous waste secondary containment system) managed at the facility.

The information to be incorporated into the contingency plan, as required by this condition, must first be approved in writing by the Agency. A revised contingency plan which incorporates the required information must be submitted to the Agency within sixty (60) days of the effective date of this permit.

- 7. If it is determined that adverse off-site impacts are possible as a result of a release, fire or explosion involving hazardous wastes (and products to be stored in the hazardous waste secondary containment system) at the facility, the Emergency Coordinator shall assess the "hazard potential" associated with the existing conditions of the facility at the beginning of each operating shift. The items which must be considered in this assessment include (1) the weather conditions (wind speed, wind direction, atmospheric stability, etc.) and associated dispersion characteristics of the atmospheric conditions, (2) the volume of the various types of hazardous wastes present at the facility, (3) the hazardous characteristics of the wastes on-site, including the products of combustion which may be produced in the event of a fire, (4) the emergency situations which may occur that day and (5) the waste management activities expected to be carried out that day. An evaluation of the potential off-site impacts through the use of commercially available models should also be completed as part of the assessment. The IEPA is currently using the computer based model titled "ARCHIE" which is available from the Federal Emergency Management Agency (202/643-3484). These evaluations shall be documented in the operating record and be readily available for review by the Emergency Coordinator and the emergency response agencies in the event of an emergency.

L. SPECIAL REQUIREMENTS FOR IGNITABLE WASTES

The Permittee shall not store containers of ignitable (RCRA definition) wastes (or product to be stored in the hazardous waste secondary containment system) in the area where all other wastes or product are stored. This separation shall be in addition to the separation of incompatibles required by 35 IAC 724.277.

SECTION II
STANDARD CONDITIONS
GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 IAC 702.142 and 703.125)

7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 35 IAC 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 IAC 702.125.
8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to the Agency, within a reasonable time, any relevant information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

13. MONITORING AND RECORDS. (35 IAC 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical technique(s) or method(s) used; and
 - vi. The result(s) of such analyses. (35 IAC 702.150)

14. REPORTING PLANNED CHANGES. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:
- a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - b.
 - 1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
 - 2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))
15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:
- i. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - ii. Either:
 - a. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - b. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from the Agency of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 702.152(b) and 703.247)

16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))
17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))
18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))
19. TWENTY-FOUR HOUR REPORTING.
 - a. The Permittee shall report to the Agency any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
 - b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))
20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
 - a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
 - b. Unmanifested waste report: The permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)
 - c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)

23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency
Division of Land Pollution Control #24
Planning and Reporting Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)
25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.
26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
- a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
 - b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
 - c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
 - d. Closure plan as required by 35 IAC 724.212(a) and this permit.
 - e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
 - f. Operating record as required by 35 IAC 724.173 and this permit.
 - g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.
27. WASTE MINIMIZATION. The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

GENERAL FACILITY STANDARDS

28. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify the Agency in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. NOTICE OF WASTE FROM OFF-SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
30. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. SECURITY. The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. GENERAL REQUIREMENTS. The Permittee shall not store ignitable, reactive, or incompatible wastes at the facility.

PREPAREDNESS AND PREVENTION

35. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)
36. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.

37. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

CONTINGENCY PLAN

41. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Agency as required by 35 IAC 724.156(j).
42. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments; hospitals and state and local emergency response teams as required by 35 IAC 724.153.
43. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
44. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

45. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172 and 724.176.
46. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
47. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

CLOSURE

48. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
49. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
50. NOTIFICATION OF CLOSURE. The Permittee shall notify the Agency at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
51. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
52. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
53. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to the Agency in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
54. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.

- b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
 - c. Kept on record at the facility and updated. (35 IAC 724.242)
55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 IAC 724.243.
56. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 IAC 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

58. DISPOSAL PROHIBITION. Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with non-restricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
59. DILUTION PROHIBITION. The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).
60. WASTE ANALYSIS.
- 1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

61. STORAGE RESTRICTIONS

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

62. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

SECTION III CORRECTIVE ACTION

- A. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such necessary corrective action as to protect human health and the environment from all releases of hazardous wastes and hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at its Melrose Park, Illinois facility.
- B. The Permittee shall submit to the Illinois Environmental Protection Agency's Division of Land Pollution Control (Agency's DLPC) Permit Section, within ninety (90) days after the effective date of this permit, a written RCRA Facility Investigation (RFI) Phase I Workplan to document the absence or presence of hazardous waste or hazardous constituents in the groundwater, surface water, sediments, soils, and air from the following solid waste management units. This is a listing of SWMUs identified in the RCRA Facility Assessment (RFA) that must be addressed in the RFI and is not a complete listing of SWMUs at the subject facility.
1. Waste Handling Area, at truck dock;
 2. Fuel Oil Spill Area, located outside on the west side of facility building;
 3. Tank Car Unloading Area, located along the railroad tracks on northern edge of the facility property; and

The requirements for this RFI Phase I Workplan are outlined in Attachment E. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase I Workplan. Within 30 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval. Within 30 days of the Agency's DLPC approval of the RFI Phase I Workplan, the Permittee shall begin implementing the Workplan according to the terms and schedule in the Workplan.

- C. If the Agency's DLPC determines, based on the data obtained from the Phase I Workplan, that there has been no release of hazardous waste or hazardous constituents to the environment from the SWMU(s) identified above, no further action will be required for the SWMU(s). If the Agency's DLPC determines, based on the data, that there has been a release of hazardous waste or hazardous constituents to the environment or that the data is inconclusive, the Permittee will be notified by the Agency's DLPC. The

Permittee must then submit a RFI Phase II Workplan to determine the rate and extent of migration of hazardous waste or hazardous constituents and the concentrations of the hazardous waste or hazardous constituents in the groundwater, surface water, sediments, soils, and air. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase II Workplan. Within 30 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval. Within 30 days of the Agency's DLPC approval of the RFI Phase II Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established by the Agency.

- D. The Agency's DLPC will determine, based on the RFI Phase II final report, whether corrective measures are necessary for the SWMU(s) addressed in the RFI. If the Agency's DLPC determines that corrective measures are not necessary, no further investigative action or corrective action will be required for the SWMU(s) addressed in the RFI. If corrective measures are determined to be necessary, the Agency's DLPC will notify the Permittee in writing and will identify target cleanup objectives that any corrective measures would be expected to meet. Within 120 days of receipt of this written notification, the Permittee shall submit to the Agency's DLPC a Corrective Action Plan (CAP). The purpose of the CAP is to develop and evaluate corrective action alternative(s) and to outline one or more alternative corrective measure(s) which will satisfy the target cleanup objectives specified by the Agency's DLPC. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the CAP. Within 60 days of receipt of such comments, the Permittee must modify the CAP or submit a new CAP for the Agency's DLPC approval. The Agency's DLPC approval of one or more of the corrective measure(s) will consider performance, reliability, implementability, safety, human health and environmental impact of the measure(s). The formal approval and incorporation of the selected corrective measure(s) into the Part B Permit will be via the Class 2 Permit Modification procedures identified in 35 IAC 703.282. The Permittee shall begin implementing the selected corrective measure(s) according to the terms and schedule identified in the modified permit.

E. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such cost estimate will be based upon the cost of construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) and the cost of undertaking

at least the RFI, to meet the requirements of 35 IAC 724.201, Attachment E and this permit. This cost estimate must be submitted to the Agency's DLPC and revised according to the following schedule.

Facility Submission

Due Date

Initial Cost Estimate (with the RFI Phase I Workplan)

90 Days after effective date of this permit

Revised Cost Estimate (with the initial submittal of the RFI Report)

To be established by the Agency following approval of the RFI workplan

2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition E.1. The words "completion of corrective action" shall be substituted for "closure and/or post-closure," as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the submittal of the initial or revised cost estimates required under Condition E.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 35 IAC 724.246 at its discretion.

F. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) (i.e., a unit not specifically identified during the RFA), discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than fifteen (15) calendar days after discovery.
2. After such notification, the Agency's DLPC may request, in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit.
3. Within sixty (60) calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall prepare a SWMU Assessment Plan for determining past and present operations at the unit, as well as any sampling and analysis of ground water, land

surface and subsurface strata, surface water or air, as necessary to determine whether a release of hazardous waste or hazardous constituents from such unit(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.

4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with modifications, or disapprove the Plan in writing.

If the Agency's DLPC approves the Plan, the Permittee shall begin to implement the Plan within fifteen (15) calendar days of receiving such written notification.

If the Agency's DLPC disapproves the Plan, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan.

5. The Permittee shall submit a SWMU Assessment Report to the Agency's DLPC no later than fifteen (15) calendar days from completion of the work specified in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan. At a minimum, the Report shall provide the following information for each newly-identified SWMU:
 - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
 - b. The type and past and present function of the unit;
 - c. The general dimensions, capacities, and structural description of the unit (supply any available drawings and specifications);
 - d. The period during which the unit was operated;
 - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and

f. The results of any sampling and analysis required for the purpose of determining whether releases of hazardous wastes or hazardous constituents have occurred, are occurring, or are likely to occur from the unit.

6. Based on the results of this Report, the Agency's DLPC shall determine the need for further investigations at specific unit(s) covered in the SWMU Assessment. If the Agency's DLPC determines that such investigations are needed, the Agency's DLPC may require the Permittee to prepare a plan for such investigations. This plan will be reviewed for approval as part of a RFI Workplan.

G. FUTURE RELEASES FROM SWMUs

Whenever the Permittee becomes aware that any SWMU, that was not found to be releasing hazardous waste or hazardous constituents during the RFI, or was not addressed under the corrective action requirements of this permit, may have started to release hazardous waste or hazardous constituents, the Permittee shall report this information to the Agency's DLPC in writing within 15 days of discovery. The Permittee shall determine the nature and extent of the contamination by following the procedures set forth in Conditions B through E, beginning on the date of notification, rather than the effective date of the permit.

H. COMPLETION OF CORRECTIVE ACTION

The Permittee shall complete corrective action for all releases of hazardous waste or hazardous constituents from the SWMU's specified in Condition B, or from any other SWMU at the facility, as necessary to protect human health and the environment. The Permittee may request to Agency's DLPC to consider corrective action complete at any point during compliance with this permit. The petition should include a demonstration of the following:

1. The Permittee shall demonstrate that there have been no releases and shall also describe how releases will be prevented in the future, of hazardous waste or hazardous constituents to any media from the SWMUs; or
2. The Permittee shall demonstrate that all releases of hazardous waste or hazardous constituents to all media have been remediated to Agency approved target cleanup objectives and shall also describe how releases will be prevented in the future; or

3. Some combination of the above demonstrations; and
4. Appropriate documentation and certification.

The Permittee shall be notified in writing if the Agency's DLPC approves the request that the corrective action can be considered complete. The notification from the Agency's DLPC to the Permittee may include a release from the financial requirements of Condition E.

A determination of no further action shall not preclude the Agency's DLPC from requiring continued or periodic inspections of the SWMU(s) or continued or periodic monitoring of air, soil, ground water, or surface water, when site-specific circumstances indicate that releases of hazardous wastes including hazardous constituents are likely to occur, if necessary to protect human health and the environment.

A determination of no further action shall not preclude the Agency's DLPC from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health or the environment. In such a case, the Agency's DLPC shall initiate a permit modification to rescind the determination of no further action.

SECTION IV
REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section I: CONTAINER STORAGE		
J.	Submit certification documentation for construction to the Agency.	Within 30 Days after completion of new container storage area construction.
H.1.	Notify Agency of intent to close container storage area.	At least 180 days prior to commencement of closure.
H.1.	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
H.4.	Submit application for modification of permit and closure and post-closure care plan.	No later than 60 days after determination that container storage area cannot be clean closed.
H.5.	Update financial assurance.	No later than 30 days after permit modification is effective.
H.6.	Submit certification for closure of container storage area.	No later than 60 days after closure of container storage area is complete.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section II: STANDARD CONDITIONS		
6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Agency and copies of records required to be kept by this permit.	Reasonable time.
14	Notify Agency of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Agency of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Agency any non-compliance which may endanger health or environment.	
	telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
28	Notify Agency in writing of expected receipt of hazardous waste from foreign source.	At least 4 weeks prior to receipt of waste.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
41	Implementation of Contingency Plan. Notify appropriate state and local agencies with designated response roles. Notify appropriate local officials. Notify the Agency (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion which could threaten human health or the environment, outside the facility. Notify Agency and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h). Report to Agency details regarding incident which required implement-event. tion of contingency plan.	As needed. Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable. Immediately after determination made. Prior to resuming operation in affected areas. Within 15 days after
47	Submit annual report required by 35 IAC 724.175.	March 1 of each year.
49	Application for permit modification amending closure plan.	
50	Notify Agency that expecting to close.	At least 180 days prior to beginning closure.
54(a)	Adjust closure cost estimate for inflation.	Within 30 days after anniversary date.
54(b)	Revision of closure cost estimate.	As needed.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
55	Change in financial assurance mechanism for closure.	
56	Change in coverage for sudden and non-sudden accidental occurrences.	
57	Notify Agency of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding.
Section III: CORRECTIVE ACTIONS		
B	RCRA Facility Investigation (RFI) Phase I Workplan	Within 90 days after the effective date of this permit.

SECTION V
SPECIAL CONDITIONS

1. All hazardous and non-hazardous special wastes generated by this facility and transported off-site for recycling, treatment or disposal must be transported in accordance with the special waste stream permit and Illinois manifest system, the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809, and the conditions of the applicable waste stream permits.
2. Special wastes received at the site for storage/transfer shall be transported to the facility utilizing the Agency's special waste authorization system and manifest system.
3. All loading/unloading of special wastes shall be accomplished over spill containment devices which are constructed of non earthen materials and have been coated with a compatible impermeable coating and has been sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation.
4. Detrex shall select a coating or lining and submit the specifications for the coating and a proposed installation schedule to the Agency for approval within ninety (90) days after the effective date of this permit.
5. The Permittee shall provide the spill containment devices, the curbs and walls that are used as containment, with an impermeable surface coating or lining that:
 - a. is compatible with the waste, or any other liquid, stored in the containment system, and
 - b. will prevent migration of the waste into the concrete of the slab, wall or curb.
6. Detrex shall perform a complete inspection of the surface coating or lining yearly and perform annual maintenance to insure the integrity of the coating.
7. It shall not be an act of non-compliance if the coating or lining has been installed properly but does not live up to the manufacture's printed performance standards and/or if the coating or lining fails due to excessive wear or chemical breakdown. The Permittee shall notify the Agency within thirty (30) days of becoming aware of the failure. The facility shall request modification of its permit to install a new coating within 180 days.

8. The Permittee shall construct concrete slabs, walls and curbs that are used as containment with chemical-resistant water stops in place at all joints or install a compatible caulking or sealant at each existing joint. These joints include but are not limited to, all construction joints within the slab, walls and curbs and joints between the slab and curb, between two curbs, between the slab or curb and wall, and joints between two walls. The water stops, caulking or sealant shall be compatible with the transferred waste.
9. The areas where tank trucks are unloading shall be inspected after each use. Any release of waste observed during these inspections must be responded to immediately. Such response shall include containing and collecting the released material and removing all contaminated material.
10. Detrex shall cover the manhole located in the driveway with a polypropylene cover before loading/unloading of special waste.

ATTACHMENT A
WASTE LISTS AND HAZARDOUS WASTE
IDENTIFICATION NUMBERS

ILD074424938

LPC #0311860003

Part B Log #113

ATTACHMENT A

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE
BASED ON TOXICITY
CHARACTERISTICS

D004	Arsenic
D005	Barium
D018	Benzene
D006	Cadmium
D019	Carbon Tetrachloride
D021	Chlorobenzene
D022	Chloroform
D007	Chromium
D027	1,4-Dichlorobenzene
D028	1,2-Dichloroethane
D029	1,1-Dichloroethylene
D030	2,4-Dinitrotoluene
D034	Hexachloroethane
D008	Lead
D009	Mercury
D035	Methyl ethyl ketone
D036	Nitrobenzene
D010	Selenium
D011	Silver
D039	Tetrachloroethylene
D040	Trichloroethylene
D043	Vinyl Chloride

EPA HAZARDOUS WASTE NO.

F001

HAZARDOUS WASTE

The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane and trichlorotrifluoroethane; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F002

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, and 1,1,2-trichloro-1,2,2-trifluoroethane; all spent solvent mixtures and blends containing before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

ATTACHMENT B
CERTIFICATION DOCUMENTATION
FOR CONSTRUCTION

ILD074424938

LPC #0311860003

Part B Log #113

When submitting certifications required by this Part B permit for construction of any new unit, please complete the attached certification form. This will help to ensure that the submittal reaches its proper destination and the certification will meet the regulatory requirements. Sending the Field Operations Section (F.O.S.) copy directly to the Field Office is acceptable as long as all copies have a completed copy of the enclosed form attached and you advise the Permit Section, in writing, that a copy has been sent to F.O.S.

A documentation report and as-built drawings (sealed and signed by an Illinois Professional Engineer) must be included with this certification. Information necessary to document the construction of the unit and to support the certification must be contained within the report. This report should include a thorough description of all construction data and drawings and should be formatted in a logical and orderly manner. The construction documentation report must contain at least the following items:

1. An introduction and summary which describes the scope and purpose of the project;
2. A description of all construction activities, including quality assurance and quality control;
3. As-built drawings of the unit and a description of any deviations from the plans and specifications approved in the permit;
4. A description of the test methods used and justification for any deviations from standard test methods;
5. A summary of test results, identification of any samples which did not meet the specifications and the corrective action and retesting which was undertaken in response to any failing test results;
6. Any necessary information associated with construction of the unit to document that construction was in accordance with the plans and specifications approved by the permit;
7. Information specifically required by the permit; and
8. Any available photographs of the unit.

February, 1993
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CERTIFICATION

This statement is to be completed by both the responsible officer and the registered professional engineer upon completion of construction in accordance with 35 IAC Section 702.126. Submit one copy of the certification with original signatures and two additional copies. Forward these certification statements and any information required by the permit to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #33
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

FACILITY NAME: Detrex Corporation, Melrose Park, Illinois

IEPA SITE CODE: LPC #0311860003

U.S. EPA ID NO.: ILD074424938

PART B PERMIT LOG #113

PERMIT (OR MODIFICATION) ISSUANCE DATE:

PERMIT CONDITION NO. REQUIRING CERTIFICATION:

The _____ has been constructed in accordance with the specifications in the Part B. Documentation that the construction was in accordance with the permit is contained in the enclosed report. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registered Number

Date

(P.E. Seal)

ATTACHMENT C

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registration Number

Date

TABLE I: INSPECTION SCHEDULE
FOR HAZARDOUS WASTE STORAGE AREA

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Check container placement, stacking, aisle space and segregation	Daily	Visual
2. Check containers for adequate seals, open lids, and loose bungs	Daily	Visual
3. Check container labels	Daily	Visual
4. Check containers for corrosion, leaks, deformation	Daily	Visual
5. Check pallets for damage	Daily	Visual
6. Check the concrete floor for cracks, deterioration, wet spots	Weekly	Visual
7. Check the concrete ramps and curbs for settlement, cracks, wet spots	Weekly	Visual
8. Check the containment system for spills, leaks, stains	Weekly	Visual
9. Check the locks on gates and doors	Daily	Visual/Physical
10. Check the warning signs	Weekly	Visual
11. Check the loading/unloading area for obstructions, spills, leaks, stains	Daily (When in use)	Visual

TABLE II: INSPECTION SCHEDULE
FOR EMERGENCY AND SAFETY EQUIPMENT

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Absorbent Material	Weekly	Visual
2. Forklift	Weekly	Visual/Physical
3. Fire Extinguishers	Weekly	Visual
4. First Aid Kit	Weekly	Visual
5. Eye Wash Station/ Safety Shower	Weekly	Visual/Physical
6. Respirator	Weekly	Visual
7. Self-contained Breathing Apparatus	Weekly	Visual/Physical
8. Protective Clothing	Weekly	Visual
9. Intercom	Daily	Visual/Physical
10. Alarm System	Monthly	Visual/Physical
11. Sump Pump	Weekly	Visual/Physical
12. Polypropylene Pad	Weekly	Visual

ATTACHMENT E

REQUIRED SCOPE OF WORK FOR A RCRA
FACILITY INVESTIGATION

ILD074424938

LPC #0311860003

Part B Log #113

Scope of Work for a RCRA Facility Investigation
Detrex Corporation
ILD074424938
LPC #0311860003
Part B Log #113

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) of the solid waste management units identified in Section III of the RCRA Permit, which the Permittee is required to perform under the terms of their RCRA permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Detrex Corporation and "SWMU" refers to Solid Waste Management Unit.

I. PURPOSE

The purpose of the RFI is to determine the nature, the rate and extent of migration, and the concentrations of hazardous waste or hazardous constituents, if any, released from SWMU's into the groundwater, surface water, sediments, soil and air. This information will be used to help determine the need, scope and design of a corrective action program.

II. SCOPE OF WORK

The Scope of Work is divided into two phases. The purpose of Phase I is to demonstrate conclusively whether or not any releases of hazardous wastes or hazardous constituents have occurred from those SWMUs identified in Section III of the RCRA permit. Phase II will be implemented if the Agency's DLPC determines from the data obtained from Phase I that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive. The purpose of Phase II is to characterize the extent and rate of migration and concentration of the hazardous waste or hazardous constituents and to implement interim corrective action measures, if it is determined by the Agency's DLPC to be necessary. Each phase of the investigation is divided into three Subparts. The first Subpart deals with the development by the Permittee of a RFI Workplan. The second Subpart addresses the implementation of the RFI. The final Subpart covers the submission of reports of activities and results of the RFI. The requirements for the three Subparts are as follows.

III. RFI WORKPLANS

The Permittee shall prepare a detailed workplan for Phase I implementation as per the schedule in this Attachment of the permit. The Phase II Workplan shall be submitted upon written request by the Agency's DLPC.

The plans shall contain at a minimum the following information. Information provided by the Phase I study may be incorporated into the Phase II Workplan by reference. Information already submitted in the Part B permit application may be incorporated by reference into both workplans when appropriate.

A. FACILITY BACKGROUND

The Permittee shall submit as part of the RFI Phase I Workplan the following information:

1. Delineate the extent and construction of the SWMUs;
2. Describe the history of the utilization of the SWMUs and the surrounding areas;
3. Describe all materials managed and/or disposed at the SWMUs including, but not limited to, solid wastes, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility;
4. Describe all significant surface features (ponds, streams, depressions, etc.) and wells within 1,500 feet of the facility;
5. Describe all land usage within 1,500 feet of the facility, including all known SWMUs;
6. Describe and locate all human populations and environmental systems susceptible to contaminant exposure from releases from the SWMUs within a distance of at least 1,500 feet;
7. Describe any interim corrective action measures which were or are being planned or undertaken at the facility;
8. A history and description of past and present ownership and operation of solid and hazardous waste generation, storage, treatment and disposal activities at the facility;
9. Approximate dates or periods of past spills or releases, identification of material spilled, amount spilled, location, and a description of the response actions, including any inspection reports or technical reports generated as a result of the spill or release.

B. SITE MAP

The Permittee shall submit as part of the draft RFI Phase I Workplan a current topographic map(s) showing a distance of at least 1,500 feet around the facility at a scale of one inch equal to not more than 200 feet. Contours shall be shown on the map, with the contour interval being sufficient to clearly show the pattern of surface water flow. The map shall clearly show the following:

1. Map scale, North arrow, date, and location of facility with respect to Township, Range and Section;
2. Topography and surface drainage depicting all waterways, wetlands, 100-year floodplain, drainage patterns, and surface water areas;
3. Property lines, with the owners of all adjacent property clearly indicated;
4. Surrounding land use;
5. Locations and boundaries of all solid waste, including hazardous waste, management units, both past and present;
6. All injection and withdrawal wells; and
7. All buildings, tanks, piles, utilities, paved areas, easements, rights-of-way, and other features including all known past and present product and waste underground tanks or piping.

The map(s) shall be of sufficient detail and accuracy to locate and report all current and future work performed at the site.

C. NATURE AND EXTENT OF CONTAMINATION

The Permittee shall submit as part of the RFI Phase I Workplan, a description of the existing information on the nature and extent of contamination at the facility.

1. The Permittee's report shall summarize all possible source areas of contamination. At a minimum, this should include all regulated units, solid waste management units, spill areas, and

other suspected source areas of contamination. For each area the Permittee shall identify the following:

- a. Location of unit/area;
 - b. Quantities of solid and hazardous wastes;
 - c. Hazardous waste and hazardous constituents, to the extent known; and
 - d. Identification of areas where additional information is necessary.
2. The Permittee shall prepare an assessment and description of the existing degree and extent of contamination based on existing information. This should include:
- a. Available monitoring data and qualitative information on locations and levels of contamination at the facility;
 - b. All potential migration pathways including relevant information on geology, pedology, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality; and
 - c. The potential impact on human health and the environment, including demography, groundwater and surface water uses, and land use.

D. ADMINISTRATIVE OUTLINE

The Permittee shall submit as part of the RFI Phase I Workplan a general outline of the Phase I Workplan defining the RFI objectives, technical approach, and scheduling of tasks. The Permittee shall prepare a Project Management Plan as part of the Phase I Workplan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RFI. In order to show progressional scheduling of tasks, a bar chart format must be provided, with day zero as the approval date of the Workplan. An equivalent outline shall be prepared for the Phase II Workplan if one is required by the Agency's DLPC.

E. SITE-SPECIFIC SAMPLING PLANS-PHASE I and PHASE II

The Permittee shall prepare detailed site-specific sampling plans which address all field activities needed to obtain site-specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever possible, SW-846 (Third Edition) sampling, analysis and statistical methods shall be utilized. The plans must address all levels of the investigations, as well as types of investigations conducted, and must include groundwater, soils and sediments, air, and surface water sampling. The plans must describe in detail how each phase will be implemented. The Phase I Sampling Plan must be able to determine the presence or absence of specific hazardous waste or hazardous constituents released to the environment and must also describe the criteria that will be used to determine the presence or absence of releases. This Phase I Sampling Plan shall be submitted as part of the RFI Phase I Workplan. The Phase II Sampling Plan must be able to determine the nature, rate and extent, and concentrations of those hazardous wastes and hazardous constituents that have been found to have been released to the environment in the Phase I Study.

The Phase I Sampling Plan must include provisions for sampling and analysis of all hazardous wastes and hazardous constituents, either suspected or known to have been disposed, treated or stored in those units identified in Section III of the permit. The Phase II Plan must, at a minimum, provide for sampling and analysis of all hazardous wastes and hazardous constituents identified as being released in Phase I. The specific constituents to be sampled and analyzed will be determined separately for each affected SWMU.

1. Soils Investigation

- a. The Phase I Plan must provide for a determination of the presence or absence of release of hazardous waste and hazardous constituents into the soil around and under the SWMUs. The plan must include, but is not limited to:

- (1) A description and characterization of the soils in and around the SWMUs down to the water table including, but not limited to, the following:
 - (a) Unified soil classification;
 - (b) Soil profile; and
 - (c) Elevation of water table;

- (2) The parameters and hazardous constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (3) The basis for selecting the parameters and constituents in (2) above;
 - (4) The methodology for choosing sampling locations, depths, and numbers of samples;
 - (5) Sampling procedures for each parameter or constituent to be analyzed. All soil samples to be taken must be handled in accordance with 40 CFR 261, Appendix III and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed;
 - (6) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods must be provided, and
 - (7) Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.
- b. If the Agency's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred, or the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the soil. This workplan shall address and/or include, at a minimum:
- (1) A description of what is known about the horizontal and vertical extent of the contamination;
 - (2) A description of contaminant and soil chemical properties within the contaminant source area and plume, including solubility, specification,

absorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation (if known);

- (3) Specific contaminant concentrations (if known);
- (4) The velocity and direction of contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The methods and criteria to be used to define the boundaries of the plume(s) of contamination.

2. Hydrogeologic and Hydrologic Investigation

The Phase II sampling plan, if required, must provide descriptions of groundwater monitoring systems which will be capable of (1) determining whether or not any releases have occurred from the SWMUs and (2) will provide adequate data on the nature, extent and rate, and concentration of any releases identified.

Ground water monitoring will not be required for a SWMU if the permittee can demonstrate, based on the soils investigations in Section 1 above, that no releases have occurred from the SWMU (as determined by the Agency's DLPC). If releases are determined to have occurred at a particular unit, then the Phase II workplan may have to address a hydrological investigation, including groundwater monitoring at that unit. The Permittee will be notified of the requirement to perform a hydrological investigation and groundwater monitoring for a specific SWMU at the time the Agency notifies the Permittee that a Phase II Workplan is required.

Phase II groundwater monitoring efforts, if required, shall begin with a survey of previous hydrogeologic studies and other existing related data. The results of the survey shall be summarized in the Phase II report and summary.

- a. Except to the extent that adequate existing hydrogeologic data already exist which can be used in the investigation,

a plan for evaluating groundwater flow patterns shall be designed to provide the following information:

- (1) A description of the regional geologic and hydrogeologic characteristics in the vicinity, including local stratigraphy, regional hydrogeologic flow and areas of recharge and discharge;
- (2) An analysis of any topographic or geomorphic features that might influence the groundwater flow system;
- (3) A classification and description of the hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; an interpretation of hydraulic interconnections between saturated zones; and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;
- (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
- (5) A description of water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and
- (6) A description of any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures.

- b. Sampling and analysis of all wells shall be carried out in accordance with the approved Data Collection Quality Assurance Plan as required in III.F. below. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD) and the latest version of the Agency's DLPC design criteria. At a minimum:
- (1) The groundwater monitoring system must consist of monitoring wells in the uppermost aquifer and in each underlying aquifer, such as the sand units, which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMU, except to the extent SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are:
 - (a) representative of background quality in the uppermost aquifer and aquifers hydraulically interconnected beneath the facility; and
 - (b) not affected by any SWMUs.
 - (3) Monitoring wells in each aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations, and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous constituents that migrate from the SWMU(s).
- c. The sampling plan must specify:
- (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in or released from the SWMUs (including any possible degradation products);

- (2) The basis for selecting the parameters and constituents in (1) above;
- (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths and concentration specifications for each monitoring well to be used in the initial sampling effort;
- (4) Sampling procedures for each parameter or constituent to be analyzed, including schedules for sampling;
- (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
- (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- (7) Proposal for establishing the locations, depths, and construction specifications for monitoring wells necessary to delineate the extent of any plume. The methodology of the investigation, sampling procedures, analytical methods, and procedures for evaluating analytical results to establish the extent of the plume must be described. The workplan must also specify the criteria to be used to determine the limits of the plume.

3. Surface Water and Sediment

- a. The Phase I Workplan must provide for a determination of the presence or absence of releases of hazardous wastes and hazardous constituents into all surface waters or their sediments potentially affected by the SWMUs. A determination of "no impact" must be justified and documented to the satisfaction of the Agency's DLPC. The plan must include, but is not limited to:
 - (1) Description and characterization of all potentially affected surface waters, including locations, areas,

depths, inflows and outflows, volumes of water, seasonal fluctuations, flooding tendencies, drainage patterns, on-site and off-site affected populations and activities;

- (2) Description and characterization of sediment characteristics associated with all surface waters, including deposition areas, thickness profiles, and physical and chemical parameters;
 - (3) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. This must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (4) The basis for selecting the parameters and constituents in (3) above;
 - (5) The methodology for choosing sampling locations depths, and numbers of samples;
 - (6) Sampling procedures for each parameter of constituent to be analyzed;
 - (7) Analytical methods to be used in the analysis of the samples. If any of these methods are not identical to those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
 - (8) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- b. If the Agency's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the surface waters and sediments. The workplan shall include, at a minimum:
- (1) A description of the horizontal and vertical extent of any plumes and the extent of contamination in the underlying sediments (if known);

- (2) Specific contaminant concentrations (if known);
- (3) The horizontal and vertical direction and velocity of contaminant movement (if known);
- (4) An evaluation of the physical, biological, and chemical factors influencing contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The criteria used to define the boundaries of the plumes.

4. Air

- (a) The Phase I Workplan must provide for an investigation to characterize the particulate and gaseous contaminants released into the atmosphere. A determination of "no impact" must be justified and documented to the satisfaction of the Agency's DLPC. This investigation shall provide the following information:
 - (1) A description of the horizontal and vertical direction and velocity of contaminant movement;
 - (2) The rate and amount of release; and
 - (3) The chemical and physical composition of the contaminants released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

- (b) The Phase I Workplan must provide for characterizing the climate in the vicinity of the facility. Such information shall include, but not be limited to:
 - (1) A description of the following parameters:
 - (a) Annual and monthly rainfall averages;
 - (b) Monthly temperature averages and extremes;

- (c) Wind speed and direction;
 - (d) Relative humidity and dew point;
 - (e) Atmospheric pressure;
 - (f) Evaporation data;
 - (g) Development of inversions; and
 - (h) Climate extremes that have been known to occur in the vicinity of the facility, and the frequency of occurrence.
- (2) A description of topographic and manmade features which affect air flow and emission patterns, including:
- (a) Ridges, hills or mountain areas;
 - (b) Canyons or valleys;
 - (c) Surface water bodies;
 - (d) Wind breaks and forests;
 - (e) Buildings; and
 - (f) Other man-made features.

5. Source Characterization

The Phase I Workplan must provide for the collection of analytical data to completely characterize the hazardous wastes and/or hazardous constituents and the areas where hazardous wastes and/or hazardous constituents have been released, placed, collected or removed including: type, quantity, physical form, disposition (containment or nature of deposits); and facility characteristics affecting releases. This shall include quantification of the following specific characteristics at each source area:

- a. Unit/Disposal Area Characteristics:
- (1) Location of unit/disposal area;
 - (2) Type of unit/disposal area;

- (3) Design features;
- (4) Operating practices (past and present);
- (5) Period of operation;
- (6) Age of unit/disposal area;
- (7) General physical conditions;
- (8) Structural integrity (cracks, joints, gaps, patches, maintenance history, etc.); and
- (9) Method used to close the unit.

b. Waste or Hazardous Constituent Characteristics

- (1) Type of waste or hazardous constituents placed in the units:
 - (a) Source, if known;
 - (b) Hazardous classification;
 - (c) Quantity; and
 - (d) Chemical composition.
- (2) Physical and chemical characteristics:
 - (a) Physical form (solid, liquid, gas);
 - (b) Physical description;
 - (c) Temperature;
 - (d) pH;
 - (e) General chemical class (e.g. acid, solvent);
 - (f) Molecular weight;
 - (g) Density;
 - (h) Boiling point;

- (i) Viscosity;
 - (j) Solubility in water;
 - (k) Cohesiveness of the waste;
 - (l) Vapor pressure; and
 - (m) Flash point.
- (3) Migration and dispersal characteristics of the waste:
- (a) Sorption;
 - (b) Biodegradability, bioconcentration;
 - (c) Photodegradation rates;
 - (d) Hydrolysis rates; and
 - (e) Chemical transformations.

The Permittee shall justify and document the procedures used in making the above determinations.

6. Potential Receptors

The Phase I Workplan must provide for collection of data describing the human populations and environmental systems within a radius of 1,500 feet of the facility boundary. The following characteristics shall be identified:

- a. Local uses and possible future uses of groundwater:
 - (1) Type of use (e.g. municipal or residential drinking water source, industrial, etc.); and
 - (2) Location of groundwater users, including wells and discharge areas.
- b. Local uses and possible future uses of surface waters draining the facility:
 - (1) Domestic and municipal;
 - (2) Recreational;

- (3) Agricultural;
 - (4) Industrial; and
 - (5) Environmental.
- c. Human use of, or access to, the facility and adjacent lands, including, but not limited to:
- (1) Recreation;
 - (2) Agriculture;
 - (3) Residential;
 - (4) Commercial;
 - (5) Zoning; and
 - (6) Location between population locations and prevailing wind direction.
- d. A description of the biota in surface water bodies on, adjacent to, or affected by the facility.
- e. A description of ecology of, and adjacent to the facility.
- f. A demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age, sex, and sensitive subgroups.
- g. A description of any endangered or threatened species near the facility.

F. DATA COLLECTION QUALITY ASSURANCE

The Permittee shall prepare a plan to document all monitoring procedures, sampling, field measurements, and sample analysis performed during the investigation so as to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented. This shall be submitted with the RFI Phase I Workplan.

Quality Assurance. Sampling methods and equipment, as well as laboratory analytical methods, shall follow guidance in U.S. EPA's SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (see 40 CFR 260.11). Field sampling methods, including soil sampling, not included in SW-846 must be approved by the Agency's DLPC before they are used in the RFI. This includes methods such as drilling, borings, etc. When available, standard procedures, as defined by U.S. EPA, IEPA or ASTM, should be followed. All soil samples which are to be taken must be handled in accordance with 40 CFR, Part 261, Appendix III and the Agency's soil volatile sampling procedures if volatile sampling is required. The analytical methods which will be used must be specified and must be EPA-approved.

Soil samples for volatile organics analysis require specialized sampling and handling procedures. Under no circumstances should soil samples for volatile organic analysis be mixed, composited or otherwise aerated.

G. DATA MANAGEMENT PLAN

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation. This shall be submitted with the RFI Phase I Workplan.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID number;
- e. Property or component measured; and
- f. Result of analysis.

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium and for each constituent monitored;
- c. Statistical analysis;
- d. Sorted data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

- a. Sampling location and sampling grid;
- b. Boundaries of sampling area, and areas where more data are required;
- c. Levels of contamination at each sampling location;
- d. Extent of contamination;
- e. Changes in concentrations in relation to the distance from the source, time, depth or other parameters; and
- f. Features affecting intermedia transport including potential receptors.

H. IMPLEMENTATION OF INTERIM MEASURES

The Permittee shall document and submit information on any interim measures which have been or are to be undertaken to abate threats to human health and the environment while the RFI or CAP are being completed. This information shall include, at a minimum:

1. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long term solution at the facility;

2. Design, construction, and maintenance requirements;
3. Schedules for design and construction; and
4. Schedules for progress reports.

If the Agency determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

I. HEALTH AND SAFETY PLAN

Under the provisions of 29 CFR 1910 (54 FR 9,295, March 6, 1989), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

IV. IMPLEMENTATION OF RFI

The Permittee shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s) and the RFI schedule. Any actual or anticipated deviations from the Workplan(s) or the RFI schedule shall be reported no later than the time of submission of the next quarterly report subsequent to the determination of need or actual deviation from the Workplan.

V. SUBMISSION OF REPORTS AND RESULTS OF RFI ACTIVITIES

The Permittee must prepare and submit quarterly progress reports and a final report on the activities and results of the Phase I RFI activities and, if required, Phase II RFI activities. The quarterly reports shall contain at a minimum:

- A. An estimate of the percentage of the investigation completed;
- B. Summary of activities completed during the reporting period;
- C. Summaries of all actual or proposed changes to the Workplan or its implementation;
- D. Summaries of all actual or potential problems encountered during the reporting period;
- E. Proposal for correcting any problems;
- F. Projected work for the next reporting period; and
- G. Other information or data as requested in writing by the Agency's DLPC.

The primary objective of the Phase I final report is to conclusively determine either the presence or absence of releases of hazardous waste or hazardous constituents to the groundwater, surface water, air, sediments, and soil. If it is determined by the Agency's DLPC that there have been no releases, the Agency's DLPC may recommend that further investigation is not needed. If the evidence is either inconclusive or confirms a release, the Agency's DLPC will require Phase II of the plan be implemented. The final report of Phase II will be required to document the extent, rate and type of contamination at the site. The results of both phases of the investigation must be of sufficient content and quality to support and develop a corrective action program if one is deemed necessary by the Agency's DLPC. The Agency's DLPC will provide comments on all final draft reports. The final reports must adequately address these comments. The following table summarizes the implementation and reporting schedule to be followed by the Permittee.

RFI IMPLEMENTATION SCHEDULE

Facility Action	Due Date
Submission of RFI Phase I Workplan	Within 90 days after effective date of the permit
Completion of RFI Phase I investigation and submission of Phase I Report and Summary	Within 6 months after approval by the Agency's DLPC of Phase I Workplan
Submission of RFI Phase II Workplan	Within 60 days after notification of the need of Phase II by Agency's DLPC
Completion of RFI Phase II investigation and submission of Phase II Report and Summary	To be negotiated with the Agency's DLPC during review of Phase II workplan
Quarterly Progress Reports	Due to the Agency's DLPC by: April 15 July 15 October 15 January 15 of each year
Submission of Implementation of Interim Measures Report	Within 30 days from the date interim measures were determined to be necessary

AD:lat/sp/1518q,1-80



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

USEPA

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

September 30, 1992

Detrex Corporation
Attention: Mr. Daniel Anderson
Branch Manager
2537 LeMoyné Avenue
Melrose Park, Illinois 60160

Clauss Industrial District
Attention: Mr. Richard R. Lareno
Managing Agent
21150 Prestwick Drive
Barrington, Illinois 60010

Re: 0311860003 -- Cook County
Detrex Corporation, Melrose Park Facility
ILD074424938
RCRA Permit Log No. 113
RCRA Part B -- Administrative Record

Gentlemen:

Enclosed is a RCRA Hazardous Waste Management Part B permit. The final permit decision is based on the administrative record contained in the Agency's files. The contents of the administrative record are described in 35 Illinois Administrative Code (IAC) Section 705.211.

This permit is divided into two permits: A RCRA permit issued by IEPA and a Hazardous Waste Management Permit issued by USEPA. The USEPA permit generally contains only those provisions and conditions raised pursuant to the Hazardous and Solid Waste Amendments of 1984 to RCRA (HSWA). The IEPA permit also enforces portions of HSWA where IEPA has authority to do so. Read both documents carefully, failure to meet any portion of either permit could result in civil and/or criminal penalties.

Within 35 days after the notification of a final permit decision, the permittee may petition the Illinois Pollution Control Board to contest the issuance of the permit. The petition shall include a statement of the reasons supporting a review, including demonstration that any issues raised in the petition, were previously raised during the public comment period. In all other respects the petition shall be in accordance with the requirements for permit appeals as set forth in 35 I.A.C. Part 105. Nothing in this paragraph is intended to restrict appeal rights under Section 40(b) of the Environmental Protection Act (35 I.A.C. 705.212(a)). If you intend to appeal the USEPA issued permit, contact USEPA -- Region V concerning the appeal procedures.

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State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

Page 2

A copy of the Agency's response to significant comments on the draft permit has been attached.

If you have any questions concerning this permit, please contact Amy L. Dragovich, P.E., at 217/524-3300. If you intend to seek review of the USEPA issued permit, please contact USEPA, Region V -- Eda Lamb at 312/353-4889 concerning the applicable review procedures.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:ALD:lat/sp/1518q, 2-3
hnd
JKM

Attachments: Permit, Response to Comments

cc: USEPA Region V, George Hamper, w/attachment



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

Operator

Detrex Corporation
Attention: Mr. Daniel Anderson
Branch Manager
2537 LeMoyne Avenue
Melrose Park, Illinois 60160

IEPA #0311860003 -- Cook County
USEPA ILD074424938
Detrex Corporation, Melrose Park Facility
RCRA Permit Log No. 113
RCRA -- Part B - Administrative Record

Owner

Clauss Industrial District
Attention: Mr. Richard R. Lareno
Managing Agent
21150 Prestwick Drive
Barrington, Illinois 60010

Issue Date: September 30, 1992
Effective Date: November 4, 1992
Expiration Date: November 4, 2002

A RCRA Part B Permit is hereby granted pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to the Detrex Corporation Melrose Park facility to construct/maintain and operate a waste management facility involved in the storage of hazardous waste. Detrex Corporation is located at 2537 LeMoyne Avenue, Melrose Park, Illinois.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 1/2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which is issued. This Permit contains 74 pages including attachments A through E.

If you have any questions regarding this Part B Permit, please contact Amy L. Dragovich, P.E., at 217/524-3300.

Lawrence W. Eastep
Lawrence W. Eastep, P.E., Manager

Permit Section
Division of Land Pollution Control

LWE:ALD:lat/sp/1518q,1

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

DETREX CORPORATION (Operator)

And

CLAUSS INDUSTRIAL DISTRICT (Owner)

Melrose Park, Illinois

LPC No. 0311860003 -- Cook County

ILD074424938

Permit Log No. 113

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SECTION I CONTAINERS

A. SUMMARY

Containers of hazardous waste shall be stored in the hazardous waste storage area. The hazardous waste storage area is located indoors, in the northern half of the facility site. The hazardous waste storage area consists of a diked concrete base. The concrete shall be coated with a chemical resistant sealant. The hazardous waste storage area shall have a containment capacity of at least 8,221 gallons. This containment capacity is adequate to contain at least 10 percent of the volume of the hazardous waste and product containers to be stored within the secondary containment system. The maximum volume of hazardous waste to be stored in the hazardous waste storage area shall be 27,500 gallons, corresponding to a maximum of 500 55-gallon drums. A maximum of 300 55-gallon product and/or empty containers may also be stored within the secondary containment area. The only waste which may be stored in the hazardous waste storage area are hazardous wastes as identified in Table C-1 of the approved permit application.

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall be performed in the approved storage area shown as the hazardous waste container storage area on Attachment D-1 of the approved permit application.
2. The Permittee may only store the hazardous wastes identified in Table C-1 of the approved permit application in the container storage area. A maximum of 27,500 gallons of waste may be stored in the container storage area. The hazardous waste codes for those wastes are listed in Attachment A to this permit.
3. The Permittee is prohibited from storing waste (hazardous or non-hazardous) in the secondary containment area that is not identified in Condition B. 2. above.
4. Prior to the shipment of any drummed waste to Detrex from a new customer, a preliminary assessment of the waste shall be conducted at the generator's facility. This preliminary assessment shall include analysis of a waste sample for specific gravity, ignitability and a visual inspection of a full depth sample, using a coliwasa, to determine color and phases. This sampling shall be conducted by Detrex's personnel, unless the generator has conducted this analysis within the last year, the drum sealed and all results recorded in Detrex's operating record. A representative sample, obtained by Detrex personnel, shall then be sent to the laboratory

and analyzed for specific gravity, ignitability, organics and TCLP metals unless the generator has conducted an analysis, which includes specific gravity, ignitability, organics and TCLP metals of the waste stream within the last year. The results of all laboratory analyses shall be recorded in Detrex's operating record and must also indicate who obtained the sample, the date of the sampling, and the sampling procedures used.

5. Detrex shall only accept wastes with a specific gravity greater than or equal to 0.80 and less than or equal to 1.68.
6. Prior to storing containers of waste in the hazardous waste container storage area, all containers shall be visually inspected and analyzed for specific gravity and the results compared to the one recorded during the preliminary assessment. In addition, all containers listed on a line item of a manifest shall be composited and analyzed for flammability (ASTM Method D4982-89). If the composite sample is flammable or even slightly flammable, all the drums within that composite shall be analyzed for flammability. Any drum that is flammable or even slightly flammable shall be analyzed for ignitability and the results compared to the one recorded during the preliminary assessment. If a discrepancy is found, the waste shall not be accepted at the facility prior to reanalysis. If the specific gravity, ignitability, and visual inspection is consistent with previous analysis, the containers may be stored at the facility.
7. Analysis for organics shall include all of the hazardous constituents for the volatile organics identified in Table C-1 of the approved permit application and Attachment A to this permit.
8. Samples which will be tested for volatile organics shall not be composited because of the volatilization which may result from any compositing method.
9. Every five (5) years a sample from each waste stream from each customer shall be sent off-site to the laboratory for analysis of specific gravity, organics, ignitability, and total metals, unless the process generating the waste changes prior to that time. If the process generating the waste changes, the waste shall not be accepted at the facility prior to reanalysis.

- a. For existing customers on the effective date of this permit, the first such analysis shall be conducted as follows:
 1. If the generator or Detrex has conducted such an analysis within the last two (2) years prior to the effective date of this permit, then the next analysis shall be conducted not later than five (5) years from the date of such analysis.
 2. If the generator or Detrex has not conducted such an analysis as set forth above, and Detrex is storing the waste stream from the generator on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the effective date of this permit.
 3. If the generator or Detrex has not conducted such an analysis as set forth in Condition I.B.9.a.1 above and Detrex is not storing the waste stream from the customer on the effective date of this permit, then such analysis shall be conducted within twelve (12) months from the date of receipt of the first delivery of the waste stream from the generator following the effective date of this permit.
 - b. For new customers obtained after the effective date of this permit, such analysis shall be conducted within five (5) years after the preliminary assessment or within five (5) years of the analysis conducted by the generator, whichever is earlier.
10. Analysis for ignitability shall be conducted in accordance with ASTM D-93 or ASTM D-3228 (35 IAC Section 721.121 (a)(1)). Analysis for flammability shall be conducted in accordance with ASTM D4982-89.
 11. A coliwasa sampler shall be used to obtain a representative sample from each drum.
 12. A maximum of 300 55-gallon product and empty containers may be maintained within the secondary containment system. The containers shall only contain the hazardous constituents permitted for storage in the hazardous waste storage area and shall not contain materials that are incompatible with any waste or other materials stored nearby in other containers unless separated from the other material

and protected from them by means of a dike, berm, wall, or other devices. In addition, containers of ignitable and combustible (NFPA definition) product shall not be stored in the secondary containment area.

13. The frequency of duplicate, blank, and spiked samples shall be consistent with the latest edition of SW-846.
- C. CONDITION OF CONTAINERS -- If a container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste or product from this container to a container that is in good condition or manage the waste in accordance with the approved permit application.
- D. COMPATIBILITY OF WASTE WITH CONTAINERS -- The Permittee must use a container made of or lined with material which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.
- E. MANAGEMENT OF CONTAINERS -- The Permittee shall comply with the following management practices:
 1. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must always be closed during storage, except when it is necessary to add or remove waste.
 2. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.
- F. INSPECTION

The Permittee shall inspect the container area weekly, in accordance with the inspection schedule, specified in Attachment D, to detect leaks and deterioration of containers and the containment system caused by corrosion or other factors. The containment system shall be repaired or recoated as soon as possible, if the inspection determines the concrete sealant has deteriorated. Detrex shall perform a complete inspection of the concrete sealant yearly and perform annual maintenance to insure the integrity of the lining.

- G. CONTAINMENT -- The Permittee shall construct, operate, and maintain the containment system according to the design plans and operating specifications contained in the approved permit application.
- H. CLOSURE -- At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the containment system. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:
1. The Permittee shall notify the Agency's DLPC in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the storage area has been properly decontaminated. This plan must be approved by the Agency's DLPC in writing prior to being implemented. Agency review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from the Agency will approve and establish:
 - a. The sampling and decontamination plan;
 - b. What contaminants must be analyzed for;
 - c. Analytical requirements (SW-846 Methods should be utilized); and
 - d. The level at which decontamination or removal is considered complete.
 2. All sweepings, wash water and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721.
 3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
6. Within sixty (60) days after closure of the container storage area is complete, the Permittee shall submit certification to the Agency that the unit has been closed in accordance with the approved closure plan.

The closure certification forms in Attachment C to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until the Agency approves the closure certification for the unit. The Agency's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- c. Copies of the waste manifests.
- d. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.

- e. A chronological summary of closure activities and the cost involved.
 - f. Tests performed, methods and results.
 - g. Color photographs of closure activities which document conditions before, during and after closure.
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
9. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.

10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials in the same container.

Incompatible wastes or materials must not be placed in the same container to prevent reactions which:

- a. Generate extreme heat or pressure, fire or explosions, or violent reactions
- b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
- c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions
- d. Damage the structural integrity of the device or facility
- e. Through other like means, threaten human health or the environment.

The basic methods for preventing such reactions are to:

- a. Treat one or both of the incompatible wastes/materials to render them compatible prior to placing them in the container
 - b. Physically separate the incompatible wastes/materials in the containers so that it is not possible for the incompatible wastes/materials to come in contact with each other.
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
 3. The Permittee shall not store containers holding a hazardous waste or product that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments unless separated from the other material or protected from them by means of a dike, berm, wall, or other devices.

J. GENERAL CONSTRUCTION REQUIREMENTS

The container storage area may only be constructed in accordance with the approved permit application and the specifications for the sealant, approved by the Agency on April 28, 1992, subject to the following modifications:

1. Within thirty days after completing the installation of the sealant and prior to any container of waste being placed or stored in the container storage area, the Permittee shall submit to the Agency a certification from a qualified, registered professional engineer, demonstrating that the container storage area meets the requirements of 35 IAC 724.275(b). This certification document shall contain the information required in Attachment B and a statement that the base is free of cracks or gaps.
2. The Permittee may not store wastes until the construction certification is approved. The Agency shall review the certification described above to ensure the container storage area and its secondary containment meets the requirements of 35 IAC 724.292 and 724.293. The Agency will respond with any comments to this certification in writing within forty-five days from the receipt of this certification. If the Agency does not respond within forty-five days from the receipt of this certification, the permittee may consider the certification approved. The Agency review of this certification will be subject to the appeal provisions contained in Section 39(a) and 40(a) of the Illinois Environmental Protection Act.

K. CONTINGENCY PLAN - ADDITIONAL SPECIAL CONDITIONS

1. The Permittee shall implement the facility contingency plan contained in the approved permit application any time there is (1) a release of hazardous waste or hazardous constituents which could threaten human health or the environment, (2) a release of hazardous waste or hazardous constituents which is equal to or greater than the Reportable Quantity (RQ) listed in Table G-3 of the permit application, (3) a fire or explosion which involves hazardous waste or which occurs in areas where hazardous wastes are stored, or (4) a release of hazardous waste or hazardous waste constituents which, based on the air dispersion modeling results contained in the contingency plan, would be expected to result in exposure above an OSHA short term exposure limit to unprotected persons. (This would not apply to responding personnel who employ the proper personal protective equipment (PPE)).

2. The Permittee shall contact the local emergency response entities as soon as possible after implementation of the contingency plan:
 - a. The entities which must be notified include:
 1. Melrose Park Fire Department
 2. Melrose Park Police Department
 3. Local ESDA Coordinator
 - b. The information which must be initially relayed to each entity includes:
 1. The type of emergency (release, fire or explosion);
 2. The type of wastes or product involved in the emergency and the approximate quantity involved;
 3. An initial assessment of the conditions at the site;
 - c. If the Permittee is able to properly respond to the emergency without any aid from the entities identified in Condition 2.a above, the Permittee shall notify each of these entities that the emergency situation no longer exists once all required emergency response and cleanup activities have been completed. This condition does not preclude the need to initially notify the entities in 2.a above.
3. Within 60 days of the effective date of this permit, the Permittee shall demonstrate to the Agency that the following information has been provided to the local fire department, the local police department and all other agencies identified in 35 IAC 724.153(b) (Note that this information must be provided to these entities to ensure the requirements of 35 IAC 724.137 are met):
 - a. A list of all hazardous wastes to be managed at the facility (generic name), including the EPA hazardous waste number;
 - b. A scaled drawing showing the location of all hazardous waste management units at the facility and all other areas where hazardous waste is handled at the facility (such as loading/unloading areas, etc.). This scaled drawing must also identify the entrances to the facility, roads within the facility and possible evacuation routes;

- c. A description of the types of hazardous waste and products managed at each hazardous waste management unit at the facility;
- d. A description of the procedures used to handle hazardous waste at the facility;
- e. An estimate of the quantity of the various types of hazardous wastes which may be present at the facility. An estimate of the typical inventory of hazardous wastes at the facility must also be included;
- f. The following information regarding the properties of the hazardous wastes managed at the facility and the products to be stored in the hazardous waste secondary containment system:

Name

USEPA Hazardous Waste No.

IDLH

TLVs (TLV-TWA, TLV-STEL, TLV-C)

Vapor Pressure at 68 F (20 C)

NFPA Designation (flammable or combustible)

Material Safety Data Sheets

Other appropriate characteristics (such as reactive class, etc.) USDOT classification.

- g. An identification of the products of incomplete combustion associated with the hazardous wastes managed at the facility. This shall include products to be stored in the hazardous waste secondary containment system.
4. Within 60 days of the effective date of this permit, the Permittee shall provide documentation to the Agency that the agreements and arrangements identified below have been made. Where necessary, documentation must be provided that any agency identified in 35 IAC 724.153(b) declined to enter into an agreement or arrangement. The specific arrangements and agreements which must be made include:
- a. Arrangements to familiarize the local police department, local fire departments and other local emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes.

- b. Agreements designating primary emergency authority to a specific police department and a specific fire department, where more than one police department and fire department might respond to an emergency. Agreements should also be made with the other surrounding police and fire departments to provide support to the primary emergency authorities;
- c. Agreements with state emergency response teams, emergency response contractors and equipment suppliers;
- d. Agreements to familiarize local hospitals with the properties of the hazardous wastes handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.
- e. Arrangements to identify a single local emergency response agency as the primary agency which will coordinate activities required by these agencies during an emergency at the facility.

The facility should also attempt to develop emergency plans and coordination agreements with the state and local emergency entities identified above. The detail of the arrangements made with the local and state emergency entities will be dependent upon the types of wastes handled at the facility and the potential need for the services of the various entities.

- 5. The Permittee shall review all components of the contingency plan with the local emergency response entities at least once every twelve months. Copies of the meeting notes and list of attendees shall be placed in the facility's operating record and be available to the Agency for review upon verbal or written request.
- 6. The Permittee shall modify the contingency plan to describe in detail the possible hazards to human health or the environment that may result from any hazardous waste (and products to be stored in the hazardous waste secondary containment system) related emergency (release, fire, or explosion). This information is necessary for the emergency coordinator to make a proper assessment of the emergency as required by 35 IAC 724.156(c) and (d). Specifically, the contingency plan must describe the hazards associated with releases and possible fires involving various hazardous wastes (and products to be stored in the hazardous waste secondary containment system) managed at the facility and the real impacts of such emergencies. Information which must be incorporated into the contingency plan includes:
 - a. The information identified in Condition 3 above.

- b. An evaluation of the hazards associated with a release or possible fire involving the various hazardous wastes which may be managed at the facility.
- c. An evaluation of the area which may potentially be impacted during a release or possible fire involving the various hazardous wastes (and products to be stored in the hazardous waste secondary containment system) managed at the facility.

The information to be incorporated into the contingency plan, as required by this condition, must first be approved in writing by the Agency. A revised contingency plan which incorporates the required information must be submitted to the Agency within sixty (60) days of the effective date of this permit.

- 7. If it is determined that adverse off-site impacts are possible as a result of a release, fire or explosion involving hazardous wastes (and products to be stored in the hazardous waste secondary containment system) at the facility, the Emergency Coordinator shall assess the "hazard potential" associated with the existing conditions of the facility at the beginning of each operating shift. The items which must be considered in this assessment include (1) the weather conditions (wind speed, wind direction, atmospheric stability, etc.) and associated dispersion characteristics of the atmospheric conditions, (2) the volume of the various types of hazardous wastes present at the facility, (3) the hazardous characteristics of the wastes on-site, including the products of combustion which may be produced in the event of a fire, (4) the emergency situations which may occur that day and (5) the waste management activities expected to be carried out that day. An evaluation of the potential off-site impacts through the use of commercially available models should also be completed as part of the assessment. The IEPA is currently using the computer based model titled "ARCHIE" which is available from the Federal Emergency Management Agency (202/643-3484). These evaluations shall be documented in the operating record and be readily available for review by the Emergency Coordinator and the emergency response agencies in the event of an emergency.

L. SPECIAL REQUIREMENTS FOR IGNITABLE WASTES

The Permittee shall not store containers of ignitable (RCRA definition) wastes (or product to be stored in the hazardous waste secondary containment system) in the area where all other wastes or product are stored. This separation shall be in addition to the separation of incompatibles required by 35 IAC 724.277.

SECTION II
STANDARD CONDITIONS
GENERAL REQUIREMENTS

1. **EFFECT OF PERMIT.** The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. **PERMIT ACTIONS.** This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. **SEVERABILITY.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. **PERMIT CONDITION CONFLICT.** In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. **DUTY TO COMPLY.** The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. **DUTY TO REAPPLY.** If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 IAC 702.142 and 703.125)

7. **PERMIT EXPIRATION.** This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 35 IAC 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 IAC 702.125.
8. **NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.** It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. **DUTY TO MITIGATE.** In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. **PROPER OPERATION AND MAINTENANCE.** The Permittee shall at all times properly operate and maintain all facilities and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. **DUTY TO PROVIDE INFORMATION.** The Permittee shall furnish to the Agency, within a reasonable time, any relevant information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. **INSPECTION AND ENTRY.** The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

13. MONITORING AND RECORDS. (35 IAC 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical technique(s) or method(s) used; and
 - vi. The result(s) of such analyses. (35 IAC 702.150)

14. REPORTING PLANNED CHANGES. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:
- a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - b.
 1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
 2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))
15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:
- i. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - ii. Either:
 - a. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - b. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from the Agency of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 702.152(b) and 703.247)

16. **TRANSFER OF PERMITS.** This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))
17. **MONITORING REPORTS.** Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))
18. **COMPLIANCE SCHEDULES.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))
19. **TWENTY-FOUR HOUR REPORTING.**
 - a. The Permittee shall report to the Agency any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
 - b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))
20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
- a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
 - b. Unmanifested waste report: The permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)
 - c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)

23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency
Division of Land Pollution Control #24
Planning and Reporting Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)
25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.
26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
- a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
 - b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
 - c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
 - d. Closure plan as required by 35 IAC 724.212(a) and this permit.
 - e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
 - f. Operating record as required by 35 IAC 724.173 and this permit.
 - g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.
27. WASTE MINIMIZATION. The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

GENERAL FACILITY STANDARDS

28. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify the Agency in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. NOTICE OF WASTE FROM OFF-SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
30. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. SECURITY. The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. GENERAL REQUIREMENTS. The Permittee shall not store ignitable, reactive, or incompatible wastes at the facility.

PREPAREDNESS AND PREVENTION

35. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)
36. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.

37. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

CONTINGENCY PLAN

41. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Agency as required by 35 IAC 724.156(j).
42. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 IAC 724.153.
43. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
44. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

45. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172 and 724.176.
46. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
47. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

CLOSURE

48. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
49. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
50. NOTIFICATION OF CLOSURE. The Permittee shall notify the Agency at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
51. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
52. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
53. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to the Agency in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
54. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.

- b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
 - c. Kept on record at the facility and updated. (35 IAC 724.242)
55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 IAC 724.243.
56. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 IAC 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

58. DISPOSAL PROHIBITION. Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with non-restricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
59. DILUTION PROHIBITION. The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).
60. WASTE ANALYSIS.
- 1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

61. STORAGE RESTRICTIONS

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

62. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

SECTION III
CORRECTIVE ACTION

- A. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such necessary corrective action as to protect human health and the environment from all releases of hazardous wastes and hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at its Melrose Park, Illinois facility.
- B. The Permittee shall submit to the Illinois Environmental Protection Agency's Division of Land Pollution Control (Agency's DLPC) Permit Section, within ninety (90) days after the effective date of this permit, a written RCRA Facility Investigation (RFI) Phase I Workplan to document the absence or presence of hazardous waste or hazardous constituents in the groundwater, surface water, sediments, soils, and air from the following solid waste management units. This is a listing of SWMUs identified in the RCRA Facility Assessment (RFA) that must be addressed in the RFI and is not a complete listing of SWMUs at the subject facility.
1. Waste Handling Area, at truck dock;
 2. Fuel Oil Spill Area, located outside on the west side of facility building;
 3. Tank Car Unloading Area, located along the railroad tracks on northern edge of the facility property; and

The requirements for this RFI Phase I Workplan are outlined in Attachment E. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase I Workplan. Within 30 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval. Within 30 days of the Agency's DLPC approval of the RFI Phase I Workplan, the Permittee shall begin implementing the Workplan according to the terms and schedule in the Workplan.

- C. If the Agency's DLPC determines, based on the data obtained from the Phase I Workplan, that there has been no release of hazardous waste or hazardous constituents to the environment from the SWMU(s) identified above, no further action will be required for the SWMU(s). If the Agency's DLPC determines, based on the data, that there has been a release of hazardous waste or hazardous constituents to the environment or that the data is inconclusive, the Permittee will be notified by the Agency's DLPC. The

Permittee must then submit a RFI Phase II Workplan to determine the rate and extent of migration of hazardous waste or hazardous constituents and the concentrations of the hazardous waste or hazardous constituents in the groundwater, surface water, sediments, soils, and air. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase II Workplan. Within 30 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval. Within 30 days of the Agency's DLPC approval of the RFI Phase II Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established by the Agency.

- D. The Agency's DLPC will determine, based on the RFI Phase II final report, whether corrective measures are necessary for the SWMU(s) addressed in the RFI. If the Agency's DLPC determines that corrective measures are not necessary, no further investigative action or corrective action will be required for the SWMU(s) addressed in the RFI. If corrective measures are determined to be necessary, the Agency's DLPC will notify the Permittee in writing and will identify target cleanup objectives that any corrective measures would be expected to meet. Within 120 days of receipt of this written notification, the Permittee shall submit to the Agency's DLPC a Corrective Action Plan (CAP). The purpose of the CAP is to develop and evaluate corrective action alternative(s) and to outline one or more alternative corrective measure(s) which will satisfy the target cleanup objectives specified by the Agency's DLPC. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the CAP. Within 60 days of receipt of such comments, the Permittee must modify the CAP or submit a new CAP for the Agency's DLPC approval. The Agency's DLPC approval of one or more of the corrective measure(s) will consider performance, reliability, implementability, safety, human health and environmental impact of the measure(s). The formal approval and incorporation of the selected corrective measure(s) into the Part B Permit will be via the Class 2 Permit Modification procedures identified in 35 IAC 703.282. The Permittee shall begin implementing the selected corrective measure(s) according to the terms and schedule identified in the modified permit.

E. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such cost estimate will be based upon the cost of construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) and the cost of undertaking

at least the RFI, to meet the requirements of 35 IAC 724.201, Attachment E and this permit. This cost estimate must be submitted to the Agency's DLPC and revised according to the following schedule.

Facility Submission

Due Date

Initial Cost Estimate (with the RFI Phase I Workplan)

90 Days after effective date of this permit

Revised Cost Estimate (with the initial submittal of the RFI Report)

To be established by the Agency following approval of the RFI workplan

2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition E.1. The words "completion of corrective action" shall be substituted for "closure and/or post-closure," as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the submittal of the initial or revised cost estimates required under Condition E.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 35 IAC 724.246 at its discretion.

F. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) (i.e., a unit not specifically identified during the RFA), discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than fifteen (15) calendar days after discovery.
2. After such notification, the Agency's DLPC may request, in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit.
3. Within sixty (60) calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall prepare a SWMU Assessment Plan for determining past and present operations at the unit, as well as any sampling and analysis of ground water, land

surface and subsurface strata, surface water or air, as necessary to determine whether a release of hazardous waste or hazardous constituents from such unit(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.

4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with modifications, or disapprove the Plan in writing.

If the Agency's DLPC approves the Plan, the Permittee shall begin to implement the Plan within fifteen (15) calendar days of receiving such written notification.

If the Agency's DLPC disapproves the Plan, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan.

5. The Permittee shall submit a SWMU Assessment Report to the Agency's DLPC no later than fifteen (15) calendar days from completion of the work specified in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan. At a minimum, the Report shall provide the following information for each newly-identified SWMU:
 - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
 - b. The type and past and present function of the unit;
 - c. The general dimensions, capacities, and structural description of the unit (supply any available drawings and specifications);
 - d. The period during which the unit was operated;
 - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and

- f. The results of any sampling and analysis required for the purpose of determining whether releases of hazardous wastes or hazardous constituents have occurred, are occurring, or are likely to occur from the unit.
6. Based on the results of this Report, the Agency's DLPC shall determine the need for further investigations at specific unit(s) covered in the SWMU Assessment. If the Agency's DLPC determines that such investigations are needed, the Agency's DLPC may require the Permittee to prepare a plan for such investigations. This plan will be reviewed for approval as part of a RFI Workplan.

G. FUTURE RELEASES FROM SWMUs

Whenever the Permittee becomes aware that any SWMU, that was not found to be releasing hazardous waste or hazardous constituents during the RFI, or was not addressed under the corrective action requirements of this permit, may have started to release hazardous waste or hazardous constituents, the Permittee shall report this information to the Agency's DLPC in writing within 15 days of discovery. The Permittee shall determine the nature and extent of the contamination by following the procedures set forth in Conditions B through E, beginning on the date of notification, rather than the effective date of the permit.

H. COMPLETION OF CORRECTIVE ACTION

The Permittee shall complete corrective action for all releases of hazardous waste or hazardous constituents from the SWMU's specified in Condition B, or from any other SWMU at the facility, as necessary to protect human health and the environment. The Permittee may request to Agency's DLPC to consider corrective action complete at any point during compliance with this permit. The petition should include a demonstration of the following:

1. The Permittee shall demonstrate that there have been no releases and shall also describe how releases will be prevented in the future, of hazardous waste or hazardous constituents to any media from the SWMUs; or
2. The Permittee shall demonstrate that all releases of hazardous waste or hazardous constituents to all media have been remediated to Agency approved target cleanup objectives and shall also describe how releases will be prevented in the future; or

3. Some combination of the above demonstrations; and
4. Appropriate documentation and certification.

The Permittee shall be notified in writing if the Agency's DLPC approves the request that the corrective action can be considered complete. The notification from the Agency's DLPC to the Permittee may include a release from the financial requirements of Condition E.

A determination of no further action shall not preclude the Agency's DLPC from requiring continued or periodic inspections of the SWMU(s) or continued or periodic monitoring of air, soil, ground water, or surface water, when site-specific circumstances indicate that releases of hazardous wastes including hazardous constituents are likely to occur, if necessary to protect human health and the environment.

A determination of no further action shall not preclude the Agency's DLPC from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health or the environment. In such a case, the Agency's DLPC shall initiate a permit modification to rescind the determination of no further action.

SECTION IV
REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section I: CONTAINER STORAGE		
J.	Submit certification documentation for construction to the Agency.	Within 30 Days after completion of new container storage area construction.
H.1.	Notify Agency of intent to close container storage area.	At least 180 days prior to commencement of closure.
H.1.	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
H.4.	Submit application for modification of permit and closure and post-closure care plan.	No later than 60 days after determination that container storage area cannot be clean closed.
H.5.	Update financial assurance.	No later than 30 days after permit modification is effective.
H.6.	Submit certification for closure of container storage area.	No later than 60 days after closure of container storage area is complete.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section II: STANDARD CONDITIONS		
6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Agency and copies of records required to be kept by this permit.	Reasonable time.
14	Notify Agency of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Agency of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Agency any non-compliance which may endanger health or environment.	
	telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
28	Notify Agency in writing of expected receipt of hazardous waste from foreign source.	At least 4 weeks prior to receipt of waste.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
41	Implementation of Contingency Plan. Notify appropriate state and local agencies with designated response roles. Notify appropriate local officials. Notify the Agency (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion which could threaten human health or the environment, outside the facility. Notify Agency and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h). Report to Agency details regarding incident which required implement-event. tion of contingency plan.	As needed. Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable. Immediately after determination made. Prior to resuming operation in affected areas. Within 15 days after
47	Submit annual report required by 35 IAC 724.175.	March 1 of each year.
49	Application for permit modification amending closure plan.	
50	Notify Agency that expecting to close.	At least 180 days prior to beginning closure.
54(a)	Adjust closure cost estimate for inflation.	Within 30 days after anniversary date.
54(b)	Revision of closure cost estimate.	As needed.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
55	Change in financial assurance mechanism for closure.	
56	Change in coverage for sudden and non-sudden accidental occurrences.	
57	Notify Agency of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding.
Section III: CORRECTIVE ACTIONS		
B	RCRA Facility Investigation (RFI) Phase I Workplan	Within 90 days after the effective date of this permit.

SECTION V
SPECIAL CONDITIONS

1. All hazardous and non-hazardous special wastes generated by this facility and transported off-site for recycling, treatment or disposal must be transported in accordance with the special waste stream permit and Illinois manifest system, the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809, and the conditions of the applicable waste stream permits.
2. Special wastes received at the site for storage/transfer shall be transported to the facility utilizing the Agency's special waste authorization system and manifest system.
3. All loading/unloading of special wastes shall be accomplished over spill containment devices which are constructed of non earthen materials and have been coated with a compatible impermeable coating and has been sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation.
4. Detrex shall select a coating or lining and submit the specifications for the coating and a proposed installation schedule to the Agency for approval within ninety (90) days after the effective date of this permit.
5. The Permittee shall provide the spill containment devices, the curbs and walls that are used as containment, with an impermeable surface coating or lining that:
 - a. is compatible with the waste, or any other liquid, stored in the containment system, and
 - b. will prevent migration of the waste into the concrete of the slab, wall or curb.
6. Detrex shall perform a complete inspection of the surface coating or lining yearly and perform annual maintenance to insure the integrity of the coating.
7. It shall not be an act of non-compliance if the coating or lining has been installed properly but does not live up to the manufacture's printed performance standards and/or if the coating or lining fails due to excessive wear or chemical breakdown. The Permittee shall notify the Agency within thirty (30) days of becoming aware of the failure. The facility shall request modification of its permit to install a new coating within 180 days.

8. The Permittee shall construct concrete slabs, walls and curbs that are used as containment with chemical-resistant water stops in place at all joints or install a compatible caulking or sealant at each existing joint. These joints include but are not limited to, all construction joints within the slab, walls and curbs and joints between the slab and curb, between two curbs, between the slab or curb and wall, and joints between two walls. The water stops, caulking or sealant shall be compatible with the transferred waste.
9. The areas where tank trucks are unloading shall be inspected after each use. Any release of waste observed during these inspections must be responded to immediately. Such response shall include containing and collecting the released material and removing all contaminated material.
10. Detrex shall cover the manhole located in the driveway with a polypropylene cover before loading/unloading of special waste.

ATTACHMENT A
WASTE LISTS AND HAZARDOUS WASTE
IDENTIFICATION NUMBERS

ILD074424938

LPC #0311860003

Part B Log #113

ATTACHMENT A

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE
BASED ON TOXICITY
CHARACTERISTICS

D004	Arsenic
D005	Barium
D018	Benzene
D006	Cadmium
D019	Carbon Tetrachloride
D021	Chlorobenzene
D022	Chloroform
D007	Chromium
D027	1,4-Dichlorobenzene
D028	1,2-Dichloroethane
D029	1,1-Dichloroethylene
D030	2,4-Dinitrotoluene
D034	Hexachloroethane
D008	Lead
D009	Mercury
D035	Methyl ethyl ketone
D036	Nitrobenzene
D010	Selenium
D011	Silver
D039	Tetrachloroethylene
D040	Trichloroethylene
D043	Vinyl Chloride

EPA HAZARDOUS WASTE NO.

F001

HAZARDOUS WASTE

The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane and trichlorotrifluoroethane; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F002

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, and 1,1,2-trichloro-1,2,2-trifluoroethane; all spent solvent mixtures and blends containing before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

ATTACHMENT B
CERTIFICATION DOCUMENTATION
FOR CONSTRUCTION

ILD074424938

LPC #0311860003

Part B Log #113

When submitting certifications required by this Part B permit for construction of any new unit, please complete the attached certification form. This will help to ensure that the submittal reaches its proper destination and the certification will meet the regulatory requirements. Sending the Field Operations Section (F.O.S.) copy directly to the Field Office is acceptable as long as all copies have a completed copy of the enclosed form attached and you advise the Permit Section, in writing, that a copy has been sent to F.O.S.

A documentation report and as-built drawings (sealed and signed by an Illinois Professional Engineer) must be included with this certification. Information necessary to document the construction of the unit and to support the certification must be contained within the report. This report should include a thorough description of all construction data and drawings and should be formatted in a logical and orderly manner. The construction documentation report must contain at least the following items:

1. An introduction and summary which describes the scope and purpose of the project;
2. A description of all construction activities, including quality assurance and quality control;
3. As-built drawings of the unit and a description of any deviations from the plans and specifications approved in the permit;
4. A description of the test methods used and justification for any deviations from standard test methods;
5. A summary of test results, identification of any samples which did not meet the specifications and the corrective action and retesting which was undertaken in response to any failing test results;
6. Any necessary information associated with construction of the unit to document that construction was in accordance with the plans and specifications approved by the permit;
7. Information specifically required by the permit; and
8. Any available photographs of the unit.

September, 1992
LPC #0311860003
Part B Log No. 113
Page B-2 of B-2

CERTIFICATION

This statement is to be completed by both the responsible officer and the registered professional engineer upon completion of construction in accordance with 35 IAC Section 702.126. Submit one copy of the certification with original signatures and two additional copies. Forward these certification statements and any information required by the permit to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #33
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

FACILITY NAME: Detrex Corporation, Melrose Park, Illinois

IEPA SITE CODE: LPC #0311860003

U.S. EPA ID NO.: ILD074424938

PART B PERMIT LOG #113

PERMIT (OR MODIFICATION) ISSUANCE DATE:

PERMIT CONDITION NO. REQUIRING CERTIFICATION:

The _____ has been constructed in accordance with the specifications in the Part B. Documentation that the construction was in accordance with the permit is contained in the enclosed report. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registered Number

Date

(P.E. Seal)

ATTACHMENT C
CLOSURE CERTIFICATION FORMS

ILD074424938

LPC #0311860003

Part B Log #113

ATTACHMENT C

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registration Number

Date

ATTACHMENT D
INSPECTION SCHEDULE

ILD074424938

LPC #0311860003

Part B Log #113

TABLE I: INSPECTION SCHEDULE
FOR HAZARDOUS WASTE STORAGE AREA

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Check container placement, stacking, aisle space and segregation	Daily	Visual
2. Check containers for adequate seals, open lids, and loose bungs	Daily	Visual
3. Check container labels	Daily	Visual
4. Check containers for corrosion, leaks, deformation	Daily	Visual
5. Check pallets for damage	Daily	Visual
6. Check the concrete floor for cracks, deterioration, wet spots	Weekly	Visual
7. Check the concrete ramps and curbs for settlement, cracks, wet spots	Weekly	Visual
8. Check the containment system for spills, leaks, stains	Weekly	Visual
9. Check the locks on gates and doors	Daily	Visual/Physical
10. Check the warning signs	Weekly	Visual
11. Check the loading/unloading area for obstructions, spills, leaks, stains	Daily (When in use)	Visual

TABLE II: INSPECTION SCHEDULE
FOR EMERGENCY AND SAFETY EQUIPMENT

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Absorbent Material	Weekly	Visual
2. Forklift	Weekly	Visual/Physical
3. Fire Extinguishers	Weekly	Visual
4. First Aid Kit	Weekly	Visual
5. Eye Wash Station/ Safety Shower	Weekly	Visual/Physical
6. Respirator	Weekly	Visual
7. Self-contained Breathing Apparatus	Weekly	Visual/Physical
8. Protective Clothing	Weekly	Visual
9. Intercom	Daily	Visual/Physical
10. Alarm System	Monthly	Visual/Physical
11. Sump Pump	Weekly	Visual/Physical
12. Polypropylene Pad	Weekly	Visual

ATTACHMENT E

REQUIRED SCOPE OF WORK FOR A RCRA

FACILITY INVESTIGATION

ILD074424938

LPC #0311860003

Part B Log #113

Scope of Work for a RCRA Facility Investigation
Detrex Corporation
ILD074424938
LPC #0311860003
Part B Log #113

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) of the solid waste management units identified in Section III of the RCRA Permit, which the Permittee is required to perform under the terms of their RCRA permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Detrex Corporation and "SWMU" refers to Solid Waste Management Unit.

I. PURPOSE

The purpose of the RFI is to determine the nature, the rate and extent of migration, and the concentrations of hazardous waste or hazardous constituents, if any, released from SWMU's into the groundwater, surface water, sediments, soil and air. This information will be used to help determine the need, scope and design of a corrective action program.

II. SCOPE OF WORK

The Scope of Work is divided into two phases. The purpose of Phase I is to demonstrate conclusively whether or not any releases of hazardous wastes or hazardous constituents have occurred from those SWMUs identified in Section III of the RCRA permit. Phase II will be implemented if the Agency's DLPC determines from the data obtained from Phase I that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive. The purpose of Phase II is to characterize the extent and rate of migration and concentration of the hazardous waste or hazardous constituents and to implement interim corrective action measures, if it is determined by the Agency's DLPC to be necessary. Each phase of the investigation is divided into three Subparts. The first Subpart deals with the development by the Permittee of a RFI Workplan. The second Subpart addresses the implementation of the RFI. The final Subpart covers the submission of reports of activities and results of the RFI. The requirements for the three Subparts are as follows.

III. RFI WORKPLANS

The Permittee shall prepare a detailed workplan for Phase I implementation as per the schedule in this Attachment of the permit. The Phase II Workplan shall be submitted upon written request by the Agency's DLPC.

The plans shall contain at a minimum the following information. Information provided by the Phase I study may be incorporated into the Phase II Workplan by reference. Information already submitted in the Part B permit application may be incorporated by reference into both workplans when appropriate.

A. FACILITY BACKGROUND

The Permittee shall submit as part of the RFI Phase I Workplan the following information:

1. Delineate the extent and construction of the SWMUs;
2. Describe the history of the utilization of the SWMUs and the surrounding areas;
3. Describe all materials managed and/or disposed at the SWMUs including, but not limited to, solid wastes, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility;
4. Describe all significant surface features (ponds, streams, depressions, etc.) and wells within 1,500 feet of the facility;
5. Describe all land usage within 1,500 feet of the facility, including all known SWMUs;
6. Describe and locate all human populations and environmental systems susceptible to contaminant exposure from releases from the SWMUs within a distance of at least 1,500 feet;
7. Describe any interim corrective action measures which were or are being planned or undertaken at the facility;
8. A history and description of past and present ownership and operation of solid and hazardous waste generation, storage, treatment and disposal activities at the facility;
9. Approximate dates or periods of past spills or releases, identification of material spilled, amount spilled, location, and a description of the response actions, including any inspection reports or technical reports generated as a result of the spill or release.

B. SITE MAP

The Permittee shall submit as part of the draft RFI Phase I Workplan a current topographic map(s) showing a distance of at least 1,500 feet around the facility at a scale of one inch equal to not more than 200 feet. Contours shall be shown on the map, with the contour interval being sufficient to clearly show the pattern of surface water flow. The map shall clearly show the following:

1. Map scale, North arrow, date, and location of facility with respect to Township, Range and Section;
2. Topography and surface drainage depicting all waterways, wetlands, 100-year floodplain, drainage patterns, and surface water areas;
3. Property lines, with the owners of all adjacent property clearly indicated;
4. Surrounding land use;
5. Locations and boundaries of all solid waste, including hazardous waste, management units, both past and present;
6. All injection and withdrawal wells; and
7. All buildings, tanks, piles, utilities, paved areas, easements, rights-of-way, and other features including all known past and present product and waste underground tanks or piping.

The map(s) shall be of sufficient detail and accuracy to locate and report all current and future work performed at the site.

C. NATURE AND EXTENT OF CONTAMINATION

The Permittee shall submit as part of the RFI Phase I Workplan, a description of the existing information on the nature and extent of contamination at the facility.

1. The Permittee's report shall summarize all possible source areas of contamination. At a minimum, this should include all regulated units, solid waste management units, spill areas, and

other suspected source areas of contamination. For each area the Permittee shall identify the following:

- a. Location of unit/area;
 - b. Quantities of solid and hazardous wastes;
 - c. Hazardous waste and hazardous constituents, to the extent known; and
 - d. Identification of areas where additional information is necessary.
2. The Permittee shall prepare an assessment and description of the existing degree and extent of contamination based on existing information. This should include:
- a. Available monitoring data and qualitative information on locations and levels of contamination at the facility;
 - b. All potential migration pathways including relevant information on geology, pedology, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality; and
 - c. The potential impact on human health and the environment, including demography, groundwater and surface water uses, and land use.

D. ADMINISTRATIVE OUTLINE

The Permittee shall submit as part of the RFI Phase I Workplan a general outline of the Phase I Workplan defining the RFI objectives, technical approach, and scheduling of tasks. The Permittee shall prepare a Project Management Plan as part of the Phase I Workplan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RFI. In order to show progressional scheduling of tasks, a bar chart format must be provided, with day zero as the approval date of the Workplan. An equivalent outline shall be prepared for the Phase II Workplan if one is required by the Agency's DLPC.

E. SITE-SPECIFIC SAMPLING PLANS-PHASE I and PHASE II

The Permittee shall prepare detailed site-specific sampling plans which address all field activities needed to obtain site-specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever possible, SW-846 (Third Edition) sampling, analysis and statistical methods shall be utilized. The plans must address all levels of the investigations, as well as types of investigations conducted, and must include groundwater, soils and sediments, air, and surface water sampling. The plans must describe in detail how each phase will be implemented. The Phase I Sampling Plan must be able to determine the presence or absence of specific hazardous waste or hazardous constituents released to the environment and must also describe the criteria that will be used to determine the presence or absence of releases. This Phase I Sampling Plan shall be submitted as part of the RFI Phase I Workplan. The Phase II Sampling Plan must be able to determine the nature, rate and extent, and concentrations of those hazardous wastes and hazardous constituents that have been found to have been released to the environment in the Phase I Study.

The Phase I Sampling Plan must include provisions for sampling and analysis of all hazardous wastes and hazardous constituents, either suspected or known to have been disposed, treated or stored in those units identified in Section III of the permit. The Phase II Plan must, at a minimum, provide for sampling and analysis of all hazardous wastes and hazardous constituents identified as being released in Phase I. The specific constituents to be sampled and analyzed will be determined separately for each affected SWMU.

1. Soils Investigation

- a. The Phase I Plan must provide for a determination of the presence or absence of release of hazardous waste and hazardous constituents into the soil around and under the SWMUs. The plan must include, but is not limited to:
 - (1) A description and characterization of the soils in and around the SWMUs down to the water table including, but not limited to, the following:
 - (a) Unified soil classification;
 - (b) Soil profile; and
 - (c) Elevation of water table;

- (2) The parameters and hazardous constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (3) The basis for selecting the parameters and constituents in (2) above;
 - (4) The methodology for choosing sampling locations, depths, and numbers of samples;
 - (5) Sampling procedures for each parameter or constituent to be analyzed. All soil samples to be taken must be handled in accordance with 40 CFR 261, Appendix III and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed;
 - (6) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods must be provided, and
 - (7) Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.
- b. If the Agency's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred, or the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the soil. This workplan shall address and/or include, at a minimum:
- (1) A description of what is known about the horizontal and vertical extent of the contamination;
 - (2) A description of contaminant and soil chemical properties within the contaminant source area and plume, including solubility, specification,

absorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation (if known);

- (3) Specific contaminant concentrations (if known);
- (4) The velocity and direction of contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The methods and criteria to be used to define the boundaries of the plume(s) of contamination.

2. Hydrogeologic and Hydrologic Investigation

The Phase II sampling plan, if required, must provide descriptions of groundwater monitoring systems which will be capable of (1) determining whether or not any releases have occurred from the SWMUs and (2) will provide adequate data on the nature, extent and rate, and concentration of any releases identified.

Ground water monitoring will not be required for a SWMU if the permittee can demonstrate, based on the soils investigations in Section 1 above, that no releases have occurred from the SWMU (as determined by the Agency's DLPC). If releases are determined to have occurred at a particular unit, then the Phase II workplan may have to address a hydrological investigation, including groundwater monitoring at that unit. The Permittee will be notified of the requirement to perform a hydrological investigation and groundwater monitoring for a specific SWMU at the time the Agency notifies the Permittee that a Phase II Workplan is required.

Phase II groundwater monitoring efforts, if required, shall begin with a survey of previous hydrogeologic studies and other existing related data. The results of the survey shall be summarized in the Phase II report and summary.

- a. Except to the extent that adequate existing hydrogeologic data already exist which can be used in the investigation,

a plan for evaluating groundwater flow patterns shall be designed to provide the following information:

- (1) A description of the regional geologic and hydrogeologic characteristics in the vicinity, including local stratigraphy, regional hydrogeologic flow and areas of recharge and discharge;
- (2) An analysis of any topographic or geomorphic features that might influence the groundwater flow system;
- (3) A classification and description of the hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; an interpretation of hydraulic interconnections between saturated zones; and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;
- (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
- (5) A description of water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and
- (6) A description of any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures.

- b. Sampling and analysis of all wells shall be carried out in accordance with the approved Data Collection Quality Assurance Plan as required in III.F. below. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD) and the latest version of the Agency's DLPC design criteria. At a minimum:
- (1) The groundwater monitoring system must consist of monitoring wells in the uppermost aquifer and in each underlying aquifer, such as the sand units, which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMU, except to the extent SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are:
 - (a) representative of background quality in the uppermost aquifer and aquifers hydraulically interconnected beneath the facility; and
 - (b) not affected by any SWMUs.
 - (3) Monitoring wells in each aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations, and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous constituents that migrate from the SWMU(s).
- c. The sampling plan must specify:
- (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in or released from the SWMUs (including any possible degradation products);

- (2) The basis for selecting the parameters and constituents in (1) above;
- (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths and concentration specifications for each monitoring well to be used in the initial sampling effort;
- (4) Sampling procedures for each parameter or constituent to be analyzed, including schedules for sampling;
- (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
- (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- (7) Proposal for establishing the locations, depths, and construction specifications for monitoring wells necessary to delineate the extent of any plume. The methodology of the investigation, sampling procedures, analytical methods, and procedures for evaluating analytical results to establish the extent of the plume must be described. The workplan must also specify the criteria to be used to determine the limits of the plume.

3. Surface Water and Sediment

- a. The Phase I Workplan must provide for a determination of the presence or absence of releases of hazardous wastes and hazardous constituents into all surface waters or their sediments potentially affected by the SWMUs. A determination of "no impact" must be justified and documented to the satisfaction of the Agency's DLPC. The plan must include, but is not limited to:
 - (1) Description and characterization of all potentially affected surface waters, including locations, areas,

depths, inflows and outflows, volumes of water, seasonal fluctuations, flooding tendencies, drainage patterns, on-site and off-site affected populations and activities;

- (2) Description and characterization of sediment characteristics associated with all surface waters, including deposition areas, thickness profiles, and physical and chemical parameters;
 - (3) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. This must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (4) The basis for selecting the parameters and constituents in (3) above;
 - (5) The methodology for choosing sampling locations depths, and numbers of samples;
 - (6) Sampling procedures for each parameter of constituent to be analyzed;
 - (7) Analytical methods to be used in the analysis of the samples. If any of these methods are not identical to those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
 - (8) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- b. If the Agency's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the surface waters and sediments. The workplan shall include, at a minimum:
- (1) A description of the horizontal and vertical extent of any plumes and the extent of contamination in the underlying sediments (if known);

- (2) Specific contaminant concentrations (if known);
- (3) The horizontal and vertical direction and velocity of contaminant movement (if known);
- (4) An evaluation of the physical, biological, and chemical factors influencing contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The criteria used to define the boundaries of the plumes.

4. Air

- (a) The Phase I Workplan must provide for an investigation to characterize the particulate and gaseous contaminants released into the atmosphere. A determination of "no impact" must be justified and documented to the satisfaction of the Agency's DLPC. This investigation shall provide the following information:
 - (1) A description of the horizontal and vertical direction and velocity of contaminant movement;
 - (2) The rate and amount of release; and
 - (3) The chemical and physical composition of the contaminants released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

- (b) The Phase I Workplan must provide for characterizing the climate in the vicinity of the facility. Such information shall include, but not be limited to:
 - (1) A description of the following parameters:
 - (a) Annual and monthly rainfall averages;
 - (b) Monthly temperature averages and extremes;

- (c) Wind speed and direction;
 - (d) Relative humidity and dew point;
 - (e) Atmospheric pressure;
 - (f) Evaporation data;
 - (g) Development of inversions; and
 - (h) Climate extremes that have been known to occur in the vicinity of the facility, and the frequency of occurrence.
- (2) A description of topographic and manmade features which affect air flow and emission patterns, including:
- (a) Ridges, hills or mountain areas;
 - (b) Canyons or valleys;
 - (c) Surface water bodies;
 - (d) Wind breaks and forests;
 - (e) Buildings; and
 - (f) Other man-made features.

5. Source Characterization

The Phase I Workplan must provide for the collection of analytical data to completely characterize the hazardous wastes and/or hazardous constituents and the areas where hazardous wastes and/or hazardous constituents have been released, placed, collected or removed including: type, quantity, physical form, disposition (containment or nature of deposits); and facility characteristics affecting releases. This shall include quantification of the following specific characteristics at each source area:

- a. Unit/Disposal Area Characteristics:
- (1) Location of unit/disposal area;
 - (2) Type of unit/disposal area;

- (3) Design features;
- (4) Operating practices (past and present);
- (5) Period of operation;
- (6) Age of unit/disposal area;
- (7) General physical conditions;
- (8) Structural integrity (cracks, joints, gaps, patches, maintenance history, etc.); and
- (9) Method used to close the unit.

b. Waste or Hazardous Constituent Characteristics

- (1) Type of waste or hazardous constituents placed in the units:
 - (a) Source, if known;
 - (b) Hazardous classification;
 - (c) Quantity; and
 - (d) Chemical composition.
- (2) Physical and chemical characteristics:
 - (a) Physical form (solid, liquid, gas);
 - (b) Physical description;
 - (c) Temperature;
 - (d) pH;
 - (e) General chemical class (e.g. acid, solvent);
 - (f) Molecular weight;
 - (g) Density;
 - (h) Boiling point;

- (i) Viscosity;
 - (j) Solubility in water;
 - (k) Cohesiveness of the waste;
 - (l) Vapor pressure; and
 - (m) Flash point.
- (3) Migration and dispersal characteristics of the waste:
- (a) Sorption;
 - (b) Biodegradability, bioconcentration;
 - (c) Photodegradation rates;
 - (d) Hydrolysis rates; and
 - (e) Chemical transformations.

The Permittee shall justify and document the procedures used in making the above determinations.

6. Potential Receptors

The Phase I Workplan must provide for collection of data describing the human populations and environmental systems within a radius of 1,500 feet of the facility boundary. The following characteristics shall be identified:

- a. Local uses and possible future uses of groundwater:
 - (1) Type of use (e.g. municipal or residential drinking water source, industrial, etc.); and
 - (2) Location of groundwater users, including wells and discharge areas.
- b. Local uses and possible future uses of surface waters draining the facility:
 - (1) Domestic and municipal;
 - (2) Recreational;

- (3) Agricultural;
 - (4) Industrial; and
 - (5) Environmental.
- c. Human use of, or access to, the facility and adjacent lands, including, but not limited to:
- (1) Recreation;
 - (2) Agriculture;
 - (3) Residential;
 - (4) Commercial;
 - (5) Zoning; and
 - (6) Location between population locations and prevailing wind direction.
- d. A description of the biota in surface water bodies on, adjacent to, or affected by the facility.
- e. A description of ecology of, and adjacent to the facility.
- f. A demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age, sex, and sensitive subgroups.
- g. A description of any endangered or threatened species near the facility.

F. DATA COLLECTION QUALITY ASSURANCE

The Permittee shall prepare a plan to document all monitoring procedures, sampling, field measurements, and sample analysis performed during the investigation so as to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented. This shall be submitted with the RFI Phase I Workplan.

Quality Assurance. Sampling methods and equipment, as well as laboratory analytical methods, shall follow guidance in U.S. EPA's SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (see 40 CFR 260.11). Field sampling methods, including soil sampling, not included in SW-846 must be approved by the Agency's DLPC before they are used in the RFI. This includes methods such as drilling, borings, etc. When available, standard procedures, as defined by U.S. EPA, IEPA or ASTM, should be followed. All soil samples which are to be taken must be handled in accordance with 40 CFR, Part 261, Appendix III and the Agency's soil volatile sampling procedures if volatile sampling is required. The analytical methods which will be used must be specified and must be EPA-approved.

Soil samples for volatile organics analysis require specialized sampling and handling procedures. Under no circumstances should soil samples for volatile organic analysis be mixed, composited or otherwise aerated.

G. DATA MANAGEMENT PLAN

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation. This shall be submitted with the RFI Phase I Workplan.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID number;
- e. Property or component measured; and
- f. Result of analysis.

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium and for each constituent monitored;
- c. Statistical analysis;
- d. Sorted data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

- a. Sampling location and sampling grid;
- b. Boundaries of sampling area, and areas where more data are required;
- c. Levels of contamination at each sampling location;
- d. Extent of contamination;
- e. Changes in concentrations in relation to the distance from the source, time, depth or other parameters; and
- f. Features affecting intermedia transport including potential receptors.

H. IMPLEMENTATION OF INTERIM MEASURES

The Permittee shall document and submit information on any interim measures which have been or are to be undertaken to abate threats to human health and the environment while the RFI or CAP are being completed. This information shall include, at a minimum:

1. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long term solution at the facility;

2. Design, construction, and maintenance requirements;
3. Schedules for design and construction; and
4. Schedules for progress reports.

If the Agency determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

I. HEALTH AND SAFETY PLAN

Under the provisions of 29 CFR 1910 (54 FR 9,295, March 6, 1989), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

IV. IMPLEMENTATION OF RFI

The Permittee shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s) and the RFI schedule. Any actual or anticipated deviations from the Workplan(s) or the RFI schedule shall be reported no later than the time of submission of the next quarterly report subsequent to the determination of need or actual deviation from the Workplan.

V. SUBMISSION OF REPORTS AND RESULTS OF RFI ACTIVITIES

The Permittee must prepare and submit quarterly progress reports and a final report on the activities and results of the Phase I RFI activities and, if required, Phase II RFI activities. The quarterly reports shall contain at a minimum:

- A. An estimate of the percentage of the investigation completed;
- B. Summary of activities completed during the reporting period;
- C. Summaries of all actual or proposed changes to the Workplan or its implementation;
- D. Summaries of all actual or potential problems encountered during the reporting period;
- E. Proposal for correcting any problems;
- F. Projected work for the next reporting period; and
- G. Other information or data as requested in writing by the Agency's DLPC.

The primary objective of the Phase I final report is to conclusively determine either the presence or absence of releases of hazardous waste or hazardous constituents to the groundwater, surface water, air, sediments, and soil. If it is determined by the Agency's DLPC that there have been no releases, the Agency's DLPC may recommend that further investigation is not needed. If the evidence is either inconclusive or confirms a release, the Agency's DLPC will require Phase II of the plan be implemented. The final report of Phase II will be required to document the extent, rate and type of contamination at the site. The results of both phases of the investigation must be of sufficient content and quality to support and develop a corrective action program if one is deemed necessary by the Agency's DLPC. The Agency's DLPC will provide comments on all final draft reports. The final reports must adequately address these comments. The following table summarizes the implementation and reporting schedule to be followed by the Permittee.

RFI IMPLEMENTATION SCHEDULE

Facility Action	Due Date
Submission of RFI Phase I Workplan	Within 90 days after effective date of the permit
Completion of RFI Phase I investigation and submission of Phase I Report and Summary	Within 6 months after approval by the Agency's DLPC of Phase I Workplan
Submission of RFI Phase II Workplan	Within 60 days after notification of the need of Phase II by Agency's DLPC
Completion of RFI Phase II investigation and submission of Phase II Report and Summary	To be negotiated with the Agency's DLPC during review of Phase II workplan
Quarterly Progress Reports	Due to the Agency's DLPC by: April 15 July 15 October 15 January 15 of each year
Submission of Implementation of Interim Measures Report	Within 30 days from the date interim measures were determined to be necessary

AD:lat/sp/1518q,1-80

RESPONSE TO COMMENTS

DETREX CORPORATION

Melrose Park, Illinois

Part B Log #113

ILD074424938

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RESPONSE TO COMMENTS

DETREX CORPORATION

The following comments were submitted during the public comment period in response to the draft RCRA Part B permit dated September 25, 1991. Comments were submitted by Detrex on November 5, 1991 and November 18, 1991. In addition, a letter was submitted by the Village of Melrose Park on November 8, 1991. However, the concerns raised by the Village of Melrose Park were previously submitted by Detrex Corporation in their November 5, 1991 submittal. The following provides a summary of comments received, with the Agency response to each comment located directly below each individual comment.

Comment #1

Section II, Standard Conditions, page 2 of 12, Item #10.

Since they do not do any treatment at this facility, they request we delete the words "... and the system of treatment... ."

Agency Response

This is a standard condition, however, the wording in the final permit will be revised to eliminate this reference to treatment.

Comment #2

They request that the Part B Application, Page C-9 Subsection C-2a, paragraph 1 be revised to eliminate the reference of recycling at this facility.

Agency Response:

This change must be initiated by Detrex, since this is a change to their application. A revised Page C-9 was submitted to the Agency on April 15, 1992. This revised page has been inserted into Detrex's Part B Permit application.

Comment #3

They also request that the Part B Permit indicate that the issuance of the Part B Permit does not denote any change in the operation of the Detrex facility and that recycling will not be taking place at this facility.

Agency Response

The draft permit currently indicates on its cover page, and page 1 of the Fact Sheet that this permit is for storage of hazardous waste in containers only. However, on March 31, 1992, Detrex submitted a request to delete the word "treat" from Section I, Containers, Page 7 of 13, H.10, and the words "and system of treatment" from Section II, Standard Conditions, Page 2 of 12, 10. These changes will be made to the final permit in order to address Detrex concerns.

The issuance of the Part B Permit does not mean that no changes will be conducted in the operation of the Detrex facility. While, only storage, as before, will be allowed. Conditions included in the final permit will require more stringent sampling and handling of the hazardous waste to be stored.

Detrex has also submitted comments dated November 18, 1991 and received by the Agency on November 19, 1991.

Comment #4

Fact Sheet

Detrex is concerned that they will have to close down operations while the coating of the secondary containment is being applied and inspected for approval. They have two alternatives: (a) less than 90 day storage outside of the hazardous waste storage area, and (b) seal part of the area in sections, allowing them to use part of the area.

Agency Response

35 IAC Section 722.134 does allow for a generator to accumulate hazardous waste generated on-site for less than 90 days without a permit or without interim status provided certain conditions are met. This less than 90 day accumulation area would need to be outside of the hazardous waste container storage area that is the subject of this permit.

The second option suggested would require that the IEPA modify their permit to allow the use of the hazardous waste storage area prior to approval of the sealant. This prolonged use of the container storage area without the proper sealant after the effective date is unacceptable to the Agency.

Section I, Containers, Page 8 of 13, K. General Construction Requirements provides the requirements for the sealant installation and certification. Detrex submitted specifications for the coating material on March 31, 1992. These specifications were approved by the Agency on April 28, 1992 with the provision that in order to allow Detrex to continue operations at the facility, the secondary containment area may be sealed in sections. However, upon the effective date of the Part B Permit, all hazardous waste shall be stored in the portion of the secondary containment area that has been sealed and approved in writing by the Agency. Upon completion of the application of the sealant, containers shall not be placed or stored on the sealant until the certification is approved by the Agency. Upon submittal of the construction certification, the Agency will respond within forty-five days. Therefore, this condition will be revised to indicate that Detrex has been authorized to install the sealant.

Comment #5

Section I, Containers, Page 1 of 13, A.,

They request that the word "epoxy" be replaced with the word "sealant".

Agency Response

The Agency will revise the word "epoxy" to read "sealant".

Comment #6

Section I, Containers, Page 1 of 13, A.

They request that the maximum number of product and/or empty drums be revised to 1300 drums. They indicate this will not impact the requirement to contain 10% of the liquid within the secondary containment. As an alternative, they suggest that the secondary containment area be divided into hazardous and non-hazardous/product/empty drum areas.

Agency Response

Based upon secondary containment calculations conducted by the Agency, the secondary containment area is not large enough to maintain 1300 product, empty or non-hazardous waste drums in addition to the 500 waste drums. Detrex must provide secondary containment calculations verifying that the secondary containment system has sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. The Agency would not be opposed to Detrex proposing that the secondary containment area be divided into hazardous and non-hazardous/product/empty drum areas. However, Detrex would need to modify their permit application to indicate this segregation (i.e, design drawings would need to be modified to indicate this separation with a berm and secondary containment calculations would need to be recalculated).

During a phone conversation with Detrex on April 9, 1992, Detrex acknowledged that they had misfigured the calculations and would just leave the maximum number of product and/or empty drums at 300. Revised secondary containment system capacity calculations, Attachment D-3, were submitted on June 2, 1992 to include an additional curb within the storage area. These calculations indicated that only 300 product and/or empty drums would be allowed within the secondary containment system. Therefore, this condition will remain as written.

Comment #7

Section I, Containers, Page 1 of 13, A.

They request that other DOT approved sized containers be allowed, besides 55-gallon drums. They indicate a list of containers is attached to their letter.

Agency Response

The list of DOT approved containers which Detrex proposes to store in its secondary containment system was not provided with the November 18, 1991 letter. This information would need to be incorporated into the Part B Permit application, specifically, Section D-1a(1), prior to the Agency revising the type of containers allowed. In addition, compatibility of the waste with these containers must be addressed.

Attachment D-6 was submitted on April 3, 1992 to provide the list of DOT approved containers. In addition, a revised Section D was submitted to change the word "drum" to "container" or "DOT approved container." A list summarizing the different DOT containers was submitted on June 2, 1992. Therefore, Section I, Containers, Page 1 of 13, A, and Page 2 of 13, B.6, B.12 shall be modified to use the word "container" in place of "drum."

Comment #8

Section I, Page 1 of 13, B.2.

Detrex requests that Attachment A mentioned in this section be revised to include trichlorotrifluoroethane (freon) in the list of F001 wastes, since it was identified in Table C-1 of the application.

Agency Response

Attachment A will be revised to include trichlorotrifluoroethane under the F001 listing.

Comment #9

Section I, Page 1 of 13, B.3.

They request that the words "the permitted unit" be revised to "the secondary containment area".

Agency Response

The permit will be revised to include this wording.

Comment #10

Section I, Page 1 of 13, B.4.

They request that if the customer has previously conducted a TCLP test, that it not be required as part of the preliminary assessment. They indicate that they will perform TCLP tests as required by Section I(B)(a).

Agency Response

This waste is generated by an off-site generator, so Detrex does not have a lot of control over the waste and whether or not the sample collected by the generator is representative of the waste to be shipped to Detrex. However, if the generator has conducted an analysis, which includes specific gravity, ignitability, organics and TCLP, of the waste stream within the last year, this analysis may be used in lieu of the laboratory analysis. The results of the generators sampling must be recorded in Detrex's operating record and must also indicate who obtained the sample, the date of the sampling, and the sampling procedures used. Section I(B)(a) could not be located by this reviewer.

Comment #11

Section I, Page 1 of 13, B.5.

They indicate documents will be forwarded identifying current customers for their solvent waste who can accept it with a solvent content less than 30%.

Agency Response

Documentation that customers can accept the waste solvent with a solvent content less than 30% was not provided with the November 18, 1991 letter. A letter from Detrex's Michigan office was submitted on March 31, 1992 indicating that they can accept the waste solvent with a solvent content less than 30%. A separate March 31, 1992 letter from Detrex also provides a range of specific gravities for the wastes accepted at the facility. This information was submitted to ensure that the waste solvents will contain an adequate solvent content to ensure compatibility with the other wastes. Therefore, this condition will be eliminated in the final permit, and replaced with a range of specific gravities that the wastes shall maintain.

Comment #12

Section I, Page 2 of 13, B.6.

They request that the ignitability test and specific gravity test be omitted from the on-site testing requirements. They feel these tests are redundant and unnecessary.

Agency Response

This on-site sampling was included to be able to compare the preliminary assessment sampling with the sampling conducted at the site. The ignitability test was included here to ensure that the solvents accepted do not exceed the regulatory limit for ignitables. Additional storage requirements to comply with the applicable NFPA and RCRA requirements for flammables, combustibles and ignitables would be needed if the ignitability test indicates the waste is flammable, combustible, or ignitable. However, Detrex has conducted a comparative evaluation of the flammability analysis and the ignitability testing and determined that the flammability test will be adequate to ensure that the solvents accepted do not exceed the regulatory limit for ignitables. Therefore, this condition has been modified to allow Detrex to analyze a composite of all containers listed on a line item of a manifest for flammability. If the composite is even slightly flammable, all the drums within that composite must be analyzed for flammability. Any drum that is even slightly flammable shall be analyzed for ignitability.

The specific gravity test is included to ensure that the requirements of Condition I.B.5. will be complied with. See also Comment No. 11 above. Therefore, this condition will remain as written.

Comment #13

Section I, Page 2 of 13, B.7.

They request that this condition be eliminated because the waste will already have been characterized.

Agency Response

Due to the fact the waste will have been fully characterized as part of the preliminary assessment, once the drums are accepted at Detrex the visual inspection, specific gravity and flammability test should be sufficient to ensure that the waste is consistent with the preliminary assessment analysis. However, the second sentence defines the requirements for the organics analysis required by Conditions B.4 and B.9. Therefore, the first sentence will be eliminated in the final permit.

Comment #14

Section I, Page 2 of 13, B.9.

They request that the requirement to analyze for TCLP metals be omitted. They also requested clarification on how this condition relates to sampling required by Condition I.B.4 for new customers.

Agency Response

This waste is generated by off-site generators, so Detrex does not have a lot of control over the waste and whether or not the waste has been modified. In addition, Detrex's application requests that they be allowed to store TCLP metal and organic waste.

This condition has been modified to indicate when this condition applies to new customers. For new customers, this analysis would initially be completed during the preliminary assessment. If the waste is then accepted at Detrex, the annual analysis must be conducted within five years after the preliminary assessment.

Comment #15

Section I, Containers, Page 2 of 13, B.10.

They request that ASTM Method D4982-89 be allowed for analysis of ignitability testing.

Agency Response

Section 721.121 of 35 IAC indicates that a liquid waste, other than an aqueous solution containing less than 24 percent alcohol by volume, would be considered characteristically hazardous waste for ignitability if it has a flash point less than 60°C (140°F), as determined by the Pensky-Martens Closed Cup Tester, using the test method specified in ASTM D-93, incorporated by reference in 35 Ill. Adm. Code 720.111, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3228, incorporated by reference in 35 Ill. Adm. Code 720.111, or as determined by an equivalent test method approved by the Board.

The test method proposed by Detrex ASTM Method D4982-89 is used to indicate the fire-producing potential of wastes. The test method also indicates it is "designed and intended as preliminary tests to complement the more sophisticated quantitative analytical techniques that may be used to determine flammability". This test method is not designed to provide the temperature at which the liquid would flash. However, this condition will be modified to indicate analysis for flammability shall be conducted in accordance with ASTM D4982-89.

Comment #16

Section I, Containers, Page 2 of 13, B.12.

They request that this condition be modified to allow 1300 product and/or empty drums be maintained within the secondary containment system. In addition, they request that the last sentence, regarding containers of ignitable and combustible containers be stored in an area separate from the area where all other wastes or products are stored, be deleted. They indicate ignitable and combustible wastes will not be stored here.

Agency Response

See response to Comment #6 above. In addition, while Detrex has not specifically included ignitable wastes in their list of wastes to be stored, if an ignitable or combustible product is accepted at the facility, additional storage requirements to comply with the applicable NFPA and RCRA requirements for flammables, combustibles, and ignitables would be needed if the ignitability test indicates the waste or product is flammable, combustible, or ignitable. Therefore, this condition will be modified to indicate that ignitable and combustible product shall not be stored in the secondary containment area.

Comment #17

Section I, Page 2 of 13, B.13.

They request that this condition be modified to indicate it applies to only waste and product stored within the secondary containment area. They

also request that the last sentence, requiring a new composite sample be created once a week, be deleted.

Agency Response

During a phone conversation with Detrex on March 26, 1992, it was determined that by accepting only wastes within a set range of specific gravities, Detrex would be able to ensure that the waste solvents will contain an adequate solvent content to ensure compatibility. See Agency response to Comment #11 above. Further review of the compatibility charts provided in Attachment C-4 of the Part B Permit application and the waste codes identified on the facilities Part A application indicated that pyridine was the only waste that would be incompatible. Therefore, Detrex agreed to remove pyridine from their list of waste codes and submitted a revised Part A on August 17, 1992 deleting pyridine from the list of waste codes. Therefore, this condition will be eliminated in the final permit.

Comment #18

Section I, Page 3 of 13, E.

They request that this condition be clarified to allow temporary opening for the purpose of gathering samples.

Agency Response

The statement "except when it is necessary to add or remove waste" includes the temporary opening for the purpose of gathering samples. Therefore, this condition will remain as written.

Comment #19

Section I, Page 7 of 13, I., J.

They request that these conditions be deleted because Detrex does not plan to handle these wastes.

Agency Response

These conditions are standard conditions attached to the permit to inform Detrex of additional requirements that would apply if ignitable, reactive, or incompatible wastes are accepted. Ignitable and reactive wastes will not be accepted at this facility. Therefore, Condition I will be deleted from the final permit. Condition J will be revised to delete the exemption wording which would allow them to store incompatible wastes if they followed certain procedures.

Comment #20

Section I, Page 8 of 13, K.

They request that the word "epoxy" be replaced with the word "sealant".

Agency Response

The Agency will revise the word "epoxy" to read "sealant".

Comment #21

Section I, Page 9 of 13, L.

They request that the contingency plan be implemented only if a release includes a reportable quantity of a hazardous substance, as defined in the federal regulations.

Agency Response

35 IAC Section 724.151(b) indicates that the contingency plan must be carried out immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment. Due to the limited time to evaluate emergency situations (release, fire or explosion), the Agency has determined that an adequate demonstration cannot be made initially to determine whether a release could threaten human health or the environment. The Agency is provided the authority under 35 IAC 703.241 to impose terms and conditions which the Agency determines are necessary to protect human health and the environment.

Detrex submitted revised pages to their contingency plan on April 15, 1992 to include reportable quantities when evaluating release scenarios for implementation of the contingency plan. They also included revised procedures for implementing the contingency plan during a fire and/or explosion. Therefore, this condition has been modified to indicate the contingency plan shall be implemented anytime there is (1) a release of hazardous waste or hazardous constituents which could threaten human health or the environment, (2) a release of hazardous waste or hazardous constituents which is equal to or greater than the Reportable Quantity (RQ) listed in Table G-3 of the permit application, (3) a fire or explosion which involves hazardous waste or which occurs in areas where hazardous wastes are stored, or (4) a release of hazardous waste or hazardous constituents which, based on the air dispersion modeling results contained in the contingency plan, would be expected to result in exposure above an OSHA short-term exposure limit to unprotected workers. (This would not apply to responding personnel who employ the proper personal protective equipment (PPE)).

Comment #22

Section I, Pages 10 and 13 of 13, L.3.g, M.

They request that these conditions be deleted because Detrex does not plan to handle these wastes.

Agency Response

These conditions are standard conditions attached to the permit to inform Detrex of additional requirements that would apply if ignitable, reactive, or incompatible wastes are present at this facility. However, Condition L.3.g will be modified to indicate that this condition applies to all hazardous wastes managed at the facility, and Condition M will be modified to indicate that ignitables shall not be stored in the area where all other wastes and products are stored.

Comment #23

Section II, Standard Conditions, Page 7 of 12, 27.

They request clarification of this condition, since they do not generate waste, but only store wastes.

Agency Response

This condition is a standard condition that applies only to waste that is generated by Detrex at this facility.

Comment #24

Section II, Page 8 of 12, 34.

They request that this condition be deleted because Detrex does not plan to handle these wastes.

Agency Response

This condition is a standard condition attached to the permit to inform Detrex of additional requirements that would apply if ignitable, reactive or incompatible wastes are accepted. However, this condition will be modified to state that the permittee shall not store ignitable, reactive, or incompatibles at this facility.

Comment #25

Section III, Corrective Action, Page 1 of 6, B.2.

They request that the fuel oil spill area be deleted from the list of Solid Waste Management Units. They feel any release would have been inadvertent and would not have been the result of normal handling of hazardous wastes.

Agency Response

The definition of Solid Waste Management Unit (SWMU) includes any discernible unit at which solid wastes have been placed at any time,

irrespective of whether the unit was intended for managing hazardous or solid waste and includes any area at a RCRA facility at which solid wastes have been released routinely and systematically. Detrex has not demonstrated to the Agency that this area did not include routine and systematic releases of solid waste. If Detrex wants to further pursue deleting this area from the list of SWMU's, Detrex must provide additional information documenting why it should not be included.

Soil sampling in the fuel oil spill area was conducted for BETX (benzene, ethylbenzene, toluene, and xylene) and PNAs. The results were submitted to the Agency by FAX on May 28, 1992. However, the detection limits used are not lower than the cleanup objectives the Agency would establish for this facility. Analysis for carcinogenic PNAs (i.e., benzo(a) anthracene, chrysene, benzo(b) fluoranthene, benzo(k) fluoranthene, benzo(a) pyrene, dibenzo(a,h) anthracene, indeno (1,2,3-cd)pyrene) must be conducted using SW-846 test method 8310 in order to achieve the Agency acceptable detection limits and cleanup objectives. Therefore, additional sampling must be conducted before the Agency can delete this unit from the list of SWMUs. This information should be included in the RFI Phase I workplan.

Comment #26

Section III, Page 1 of 6, B.3.

They request that the tank car unloading area be deleted from the list of Solid Waste Management Units. They indicate that hazardous waste is not received at the facility via tank car, and they know of no release of contaminants at this area.

Agency Response

The definition of Solid Waste Management Unit (SWMU) includes any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for managing hazardous or solid waste and includes any area at a RCRA facility at which solid wastes have been released routinely and systematically. Due to a lack of flora observed by Agency personnel during the site investigation, Detrex has not demonstrated to the Agency that this area did not include routine and systematic releases of solid waste. If Detrex wants to further pursue deleting this area from the list of SWMU's, Detrex must provide additional information documenting why it should not be included. This information should be included in the RFI Phase I Workplan.

Comment #27

Section III, Page 1 of 6, B.4.

They request that the possible leaking underground storage tank be deleted from the list of Solid Waste Management Units. They indicate that area has already been closed pursuant to an authorized closure. They also indicate that documents evidencing the closure of this underground tank, including the required government inspection has been attached to their comments.

Agency Response

The referenced documents were not attached to the November 18, 1991 comments submitted to the Agency by Detrex. However, the additional information was submitted March 27, 1992 and it appears that the underground storage tank has been abandoned in place in accordance with the Office of the State Fire Marshal requirements. During closure the tank was pressure washed and inspected. The tank inspection determined that the tank was not leaking, so it was filled with torpedo sand. Therefore, this SWMU will be eliminated from the final permit.

AD/mls/sp559r/1-14

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
HAZARDOUS WASTE MANAGEMENT PERMIT**

Name of Permittee: Detrex Corporation, Gold Shield Solvents

Facility Location: **Street Address:** 2537 LeMoyne Avenue
City, State: Melrose Park, Illinois 60160

EPA Identification Number: ILD 074 424 938

Effective Date: November 4, 1992

Expiration Date: November 4, 2002

Authorized Activities:

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, (42 U.S.C. §6901, et seq.), and regulations promulgated thereunder by the United States Environmental Protection Agency (U.S. EPA) (codified in Title 40 of the Code of Federal Regulations (40 CFR)), Federal permit conditions (hereinafter called the permit) of the RCRA permit are issued to Detrex Corporation, Gold Shield Solvents (hereinafter called the Permittee), for the facility located in Melrose Park, Illinois.

The RCRA permit contains both the effective Federal permit conditions (contained herein) and the effective State permit conditions issued by the State of Illinois RCRA program authorized under 40 CFR Part 271 (hereinafter called the State permit). When both this permit and the State permit are effective, the Permittee has an effective RCRA permit which authorizes the Permittee to conduct hazardous waste management activities as specified in the RCRA permit.

Permit Approval:

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. On April 30, 1990, the State of Illinois also received authorization to administer certain specific portions of the hazardous waste program required under HSWA. Those conditions for which the State has not yet been authorized to administer must be issued by the U.S. EPA. These additional conditions are contained in this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260, 261, 262, 264, 266, 268, 270, and 124, and applicable provisions of HSWA.

This permit is based on the assumption that the information submitted in the permit application, dated November 7, 1988, and in any subsequent amendments (hereinafter referred to as the application), is accurate. Any inaccuracies found in this information may be grounds for the termination, revocation and reissuance, or modification of this permit (see 40 CFR 270.41, 270.42 and 270.43) and potential enforcement action. The Permittee must inform the U.S. EPA of any deviation from or changes in the information in the submitted application as soon as the Permittee becomes aware of such deviation or changes.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after service of notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR 124.19.

Effective Date:

The RCRA permit is effective when both this permit and the State permit are effective. This permit is effective as of the effective date specified on the previous page, unless a review is requested under 40 CFR 124.19. The permit shall remain in effect until the expiration date, unless revoked and reissued, or terminated (40 CFR 270.41, 270.42, and 270.43), or continued in accordance with 40 CFR 270.51.

Issued this 20th day of March, 1992

by David A. Ullrich
David A. Ullrich, Director
Waste Management Division

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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HAZARDOUS WASTE MANAGEMENT PERMIT**

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The RCRA permit contains both the effective Federal permit conditions (contained herein) and the effective State permit conditions issued by the State of Illinois RCRA program authorized under 40 CFR Part 271 (hereinafter called the State permit). When both this permit and the State permit are effective, the Permittee has an effective RCRA permit which authorizes the Permittee to conduct hazardous waste management activities as specified in the RCRA permit.

Permit Approval:

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. On April 30, 1990, the State of Illinois also received authorization to administer certain specific portions of the hazardous waste program required under HSWA. Those conditions for which the State has not yet been authorized to administer must be issued by the U.S. EPA. These additional conditions are contained in this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260, 261, 262, 264, 266, 268, 270, and 124, and applicable provisions of HSWA.

**Detrex Corp., Gold Shield Solvents
Melrose Park, Illinois**

PERMIT INDEX

PERMIT CONDITIONS:

- I. Standard Conditions
- II. Land Disposal Requirements
- III. Toxicity Characteristic
- IV. Air Emission Standards
- V. Schedule of Compliance

PERMIT CONDITIONS

(Note: The regulatory citations in parentheses are incorporated by reference.)

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT (40 CFR 270.4 and 270.30(g))

The Permittee is allowed to manage hazardous waste in accordance with the conditions of the RCRA permit. Any management of hazardous waste not authorized in the RCRA permit is prohibited.

Compliance with the RCRA permit during its term constitutes compliance, for the purposes of enforcement, with Subtitle C of RCRA, except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR Part 268, restricting the placement of hazardous waste in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS (40 CFR 270.30(f))

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. This permit may also be reviewed and modified at any time by the U.S. EPA to include any terms and conditions determined necessary to protect human health and the environment pursuant to Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY (40 CFR 124.16)

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. (40 CFR 270.30(a))

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit (See 40 CFR 270.61). Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and HSWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, denial of a permit renewal application, or other appropriate action.

2. Duty to Reapply. (40 CFR 270.30(b) and 270.10(h))

The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee no longer wishes to operate a hazardous waste management facility; b) the Permittee is no longer required to have a RCRA permit; or c) permission for a later date has been granted by the Regional Administrator. The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

3. Permit Expiration. (40 CFR 270.13, 270.14, 270.50, and 270.51)

This permit and all conditions herein shall be effective for a fixed term not to exceed 10 years, and will remain in effect beyond the permit's expiration date only if the Permittee has submitted a timely, complete application (per 40 CFR 270.10 and applicable sections of 270.14 through 270.29): a) to both the U.S. EPA and the State; and b) through no fault of the Permittee, the Regional Administrator and the State have not issued a new permit, as set forth in 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense. (40 CFR 270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. (40 CFR 270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment.

6. Proper Operation and Maintenance. (40 CFR 270.30(e))

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. (40 CFR 270.30(h) and 264.74)

The Permittee shall furnish to the Regional Administrator, within the time designated by the Regional Administrator, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. (40 CFR 270.30(i))

The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Recordkeeping. (40 CFR 270.30(j), 270.31, 264.73, and 264.74)

The Permittee shall retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records or other documents.

10. Reporting Planned Changes. (40 CFR 270.30(1)(1))

The Permittee shall give notice to the Regional Administrator of any planned physical alterations or additions to the permitted facility, as soon as possible, and at least 30 days before construction of such alteration or addition is commenced.

11. Anticipated Noncompliance. (40 CFR 270.30(1)(2))

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

12. Transfer of Permits. (40 CFR 270.30(1)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Regional Administrator and only if the permit is modified, or revoked and reissued, pursuant to 40 CFR 270.40(b), 270.41(b)(2), or 270.42(a). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264, 268, and 270 (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

13. Compliance Schedules. (40 CFR 270.30(1)(5) and 270.33)

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Regional Administrator no later than 14 days following each scheduled date.

14. Twenty-four Hour Reporting. (40 CFR 270.30(1)(6) and 270.33)

The Permittee shall report to the Regional Administrator any noncompliance with this permit which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
- b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the 5-day written notice requirement if the Regional Administrator waives the requirement. Upon waiver of the 5-day requirement, the Permittee shall submit a written report within 15 days of the time the Permittee becomes aware of the circumstances.

15. Other Noncompliance. (40 CFR 270.30(1)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within 15 days of when the Permittee becomes aware of the noncompliance. The reports shall contain the information listed in Condition I.D.14.

16. Other Information. (40 CFR 270.30(1)(11))

Whenever the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information to the Regional Administrator in the permit application or in any reports, records, or other documentation provided to the Regional Administrator, the Permittee shall promptly submit such facts or information.

17. Submittal of Reports or Other Information. (40 CFR 270.30(1)(7), (8), and (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

RCRA Permitting Branch, HRP-8J
Waste Management Division
U.S. EPA, Region V
77 W Jackson Boulevard
Chicago, Illinois 60604

Attention: Illinois Section

18. All other requirements contained in RCRA, as amended, and in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.

E. SIGNATORY REQUIREMENT (40 CFR 270.30(k))

All reports or other information submitted to or requested by the Regional Administrator, his designee, or authorized representative, shall be signed and certified as required by 40 CFR 270.11.

F. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12 and 40 CFR Part 2, Subpart B, any information submitted to the U.S. EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or, in the case of other submissions, by marking the words "Confidential Business Information" on each page containing such information.

If no claim is made at time of submission, the U.S. EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2.

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, all items required by 40 CFR 264.73, including the following documents and all amendments, revisions, and modifications to these documents:

1. Waste Analysis Plan, as required by 40 CFR 264.13 and this permit;
2. Operating Record, as required by 40 CFR 264.73 and this permit;
3. Notifications from generators accompanying each incoming shipment of wastes subject to 40 CFR Part 268, Subtitle C, that specify treatment standards, as required by 40 CFR 264.73, 268.7, and this permit;
4. Records regarding closed-vent systems and control devices and/or equipment leaks as required 40 CFR 264.1035, 264.1064, and 264.73, and Condition V.C. of this permit.

II. LAND DISPOSAL REQUIREMENTS

A. GENERAL CONDITIONS

1. The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by statute (Section 3004 of RCRA).
2. A mixture of any restricted waste with nonrestricted waste(s) is a restricted waste under 40 CFR Part 268.
3. The Permittee shall not in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR Part 268, Subpart D, to circumvent the effective date of a prohibition in 40 CFR Part 268, Subpart C, to otherwise avoid a prohibition in 40 CFR Part 268, Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.
4. The Permittee shall prepare and maintain a current list of the hazardous waste codes handled by the facility that are identified in 40 CFR 268, Subparts B and C. The list shall include all waste codes handled by the facility, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list shall be provided to the U.S. EPA representatives, or their designees, upon request.

B. TESTING AND RELATED REQUIREMENTS

1. The Permittee must test, in accordance with 40 CFR 268.7(a), any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
2. For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 CFR 268.41, the Permittee shall test the treatment residues, or an extract of such residues developed using the test methods described in Appendix II of 40 CFR Part 261 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the treatment residues or extract meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
3. For restricted wastes under 40 CFR 268.32 or Section 3004(d) of RCRA, which are not subject to any treatment standards under 40 CFR Part 268, Subpart D, the Permittee shall test the treatment residues according to the generator requirements specified under 40 CFR 268.32 to assure that the treatment residues comply with the applicable prohibitions of 40 CFR Part 268, Subpart C. Such testing shall be performed as required by 40 CFR 264.13.
4. A restricted waste for which a treatment technology is specified under 40 CFR 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in 40 CFR 268.42(b).
5. For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 CFR 268.43, the Permittee shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
6. The Permittee shall comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR 268.7(a) and (b).

C. STORAGE PROHIBITIONS

1. The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268, Subpart E.
2. Except as otherwise provided in 40 CFR 268.50, the Permittee may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal provided that:

- a. Each container is clearly marked to identify its contents and the date each period of accumulation begins; and
 - b. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility.
3. The Permittee may store restricted wastes for up to 1 year unless the U.S. EPA or its authorized agent can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
 4. The Permittee may store restricted wastes beyond 1 year; however, the Permittee bears the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
 5. The Permittee shall not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR 761.65(b). This waste must be removed from storage and treated or disposed as required by 40 CFR Part 268 within 1 year of the date when such wastes are first put into storage. Condition II.C.4. above, that allows storage for over 1 year with specified demonstration, does not apply to PCB wastes prohibited under 40 CFR 268.32.

III. TOXICITY CHARACTERISTIC

A. WASTE IDENTIFICATION

The Permittee may store the following wastes in the container storage area identified in the State permit, subject to the terms of the RCRA permit (including the container storage area capacity specified in the State permit) and as follows:

<u>Description of Hazardous Waste</u>	<u>EPA Hazardous Waste Number</u>	<u>Description of Unit(s)</u>
Mixed nonhalogenated products (spent solvents)	D012-D043	Container Storage Area
Mixed halogenated products (spent solvents)	D012-D043	Container Storage Area

B. WASTE CHARACTERIZATION

The Permittee must use the Toxicity Characteristic Leaching Procedure (TCLP) (Appendix II of 40 CFR Part 261), or use knowledge of the waste to determine whether a waste exhibits the characteristic of toxicity, as defined in 40 CFR 261.24. Use of the TCLP does not exempt the Permittee from also using the Extraction Procedure (EP) toxicity test if required by the State permit conditions.

C. CONDITIONS REGARDING UNITS

All units described in Condition III.A. above shall be operated in accordance with the State permit conditions pertaining to those units.

IV. AIR EMISSION STANDARDS

A. PROCESS VENTS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart AA, regarding air emission standards for process vents.

B. EQUIPMENT LEAKS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment leaks.

C. RECORDKEEPING

The Permittee shall comply with all applicable recordkeeping and reporting requirements described in 40 CFR 264.1035, 264.1036, 264.1064, and 264.1065.

D. NOTIFICATION OF REGULATED ACTIVITY

The Permittee shall notify the Regional Administrator of any waste management units which become subject to the requirements of 40 CFR Part 264, Subparts AA and BB, within 30 days of startup of the regulated activity.

E. DUTY TO COMPLY WITH FUTURE REQUIREMENTS

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 3004(n) of RCRA, as amended by HSWA.

V. SCHEDULE OF COMPLIANCE

Air Emission Regulations

Due Date

Notification of waste management units subject to the requirements of 40 CFR Part 264, Subparts AA and BB.

30 days after startup of the activity.

**RESPONSE TO COMMENTS
REGARDING THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
HAZARDOUS WASTE MANAGEMENT PERMIT
ISSUED TO
DETREX CORPORATION. GOLD SHIELD SOLVENTS
MELROSE PARK, ILLINOIS
ILD 074 424 938**

INTRODUCTION

This response is issued pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 124.17, which requires that any changes of draft permit conditions be specified along with the reason for the change; that all significant comments be described and responded to; and that any documents cited in the response be included within the administrative record.

No comments were received from the public concerning the draft Federal portion of the RCRA permit during the 45-day comment period. A request for a hearing was also not received. The only comments received were from Detrex Corporation. The comments did not deal with any of the conditions found in the United States Environmental Protection Agency (U.S. EPA) Draft Permit. The 45-day public comment period commenced on September 25, 1991. During the public comment period, copies of the permit application, Federal and State draft permits, and Fact Sheets were kept at the Melrose Park Public Library, 801 N. Broadway, Melrose Park, Illinois 60160. The termination date of this comment period was November 11, 1991.

DETERMINATION

Based on a full review of all relevant data provided to the U.S. EPA, the U.S. EPA has determined that the final permit contains such terms and conditions necessary to protect human health and the environment. In addition, based on its review of applicable materials and pertinent regulations, the U.S. EPA has determined that revision and/or clarification of the draft permit was not necessary.



217/524-3300

August 4, 1992

Detrex Corporation
Attn: Mr. Daniel Anderson
Branch Manager
2537 LeMoyne Avenue
Melrose Park, IL 60160

Clauss Industrial District
Attn: Mr. Richard R. Lareno
Managing Agency
21150 Prestwick Drive
Barrington, IL 60010

Re: 0311860003 -- Cook County
Detrex Corporation
ILD074424938
RCRA Permit Log No. 113
Concrete Sealant Certification
RCRA Part B -- Administrative Record

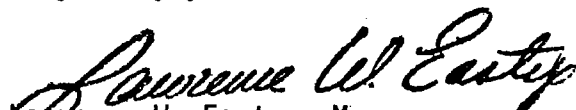
Gentlemen:

This will acknowledge receipt of your notification that the above site has been developed.

A pre-operation site inspection has been scheduled within fifteen (15) days of the date of this letter to determine if all conditions of the Development Permit have been met. If possible, you will be contacted before the inspection is made so that you may accompany the inspector on the site.

A decision is due forty-five (45) days from the date of receipt of your submittal. Should you have any questions regarding this letter, or need further assistance, contact the Permit Section at the above telephone number.

Very truly yours,


Lawrence W. Eastep, Manager
Permit Section
Bureau of Land

LWE:cla
ALO

cc: George Hamper, USEPA

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Part B 113

US EPA



DETREX CORPORATION

P.O. Box 5111, Southfield, MI 48086-5111

November 5, 1991

FAX: (313) 358-5803

TELEPHONE:
(313) 358-5800

VIA: Federal Express

Ms. Keri Luly
Directors Office
Illinois Environmental Protection Agency
220 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

RE: 0300860003 -- Cook County
Detrex Corporation, Melrose Park
Facility
ILD 074 424 938
RCRA Permit Log No. 113
RCRA Part B -- Administrative Record

RECEIVED
NOV 12 1991
IEPA-DLPC

Dear Ms. Luly,

Detrex Corporation has met with the City officials of Melrose Park to respond to their questions concerning the proposed Part B permit to be issued to the Detrex Corporation facility above by the Illinois EPA. In their review questions came up addressing the concern of Detrex "recycling" the waste brought into the facility, at the Melrose Park facility. Detrex's response was that the waste brought into the facility was recycled at another location, in another state, and not at the Melrose Park facility.

These comments arose because of the wording found in the draft permit Section II Standard Conditions, General Requirements, Page 2 of 12 #10, "...and the system of treatment...".

We have agreed with the Melrose Park officials that Detrex does not have a problem with removing this wording, if acceptable with Illinois EPA.

Additionally, in the Part B application submitted by Detrex, Section C Waste Characteristics, Page C-9 Subsection C-2a, Parameters and Rational, paragraph 1, Detrex used the wording as follows: "Table C-2 list the hazardous waste which may be received and recycled at the facility,...". The Melrose Park officials wish that the wording be changed to

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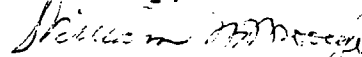
read, "Table C-2 list the hazardous waste which may be received at the facility and sent off-site for recycling...". Detrex does not have a problem in modifying the permit application to the wording mentioned above. If this is in agreement with the Illinois EPA and US EPA offices, Detrex will submit this page with the appropriate wording change.

Melrose Park officials have also requested that as part of the issued permit, either attached or in the Special Condition section, it should state that the issuance of the Part B permit does not denote any change in the operation of the Detrex facility in Melrose Park, and that recycling will not be taking place at the facility.

I appreciate your response to the above comments. If additional information is needed from Detrex, please do not hesitate to contact us. If questions regarding Melrose Parks' comments arise, you may contact Mr. Nicholas M. Spina, Attorney for the Council, 501 W. North Ave., Suite 301, Melrose Park, IL. 60160, Phone (708) 681-4525.

It is my understanding that Melrose Park will be responding to you on the above comments.

Sincerely,



William M. Moore, Jr.
Corporate Manager,
Environmental Compliance,
RCRA Section

cc: I. Shamiyeh
C. Guy
M. Tepatti
D. Anderson
B. McConnel, CRA
A. Draovich, IEPA
N. Spina, Melrose Park

Part P 113

USE PA

MIKA, MEYERS, BECKETT & JONES

ATTORNEYS AT LAW

SUITE 700

200 OTTAWA AVENUE, N. W.

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SCOTT E. DWYER
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DALE A. MATTIS
ELIZABETH K. BRANSBORFER
LINDA L. BLAIS
NEIL L. KIMBALL
JAMES F. SCALES
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J. WARREN EARDLEY
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TELEPHONE
(616) 459-3200

FACSIMILE
(616) 459-8065

November 4, 1991

Amy L. Dragovich, P.E.
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, Illinois 62794-9276

In re: 0311860003--Cook County
Detrex Corporation, Melrose Park Facility
ILD 074424938
RCRA Permit Log. No. 113
RCRC Part B - Administrative Record

Dear Ms. Dragovich:

This letter will confirm our conversation earlier today regarding your agreement to extend the deadline by which Detrex Corporation must file comments to your draft RCRA Hazardous Waste Management Part B Permit. Detrex will be submitting written comments on or before November 16, 1991, which is the deadline including the one week extension.

As I indicated to you on the telephone, the reason for Detrex's requested extension pertains to the need for some additional time to review the voluminous document which was forwarded to Detrex and Detrex's attempt to organize its comments in a logical fashion so as to facilitate your review of the same. As I am sure you are aware, the Part B Permit is extremely detailed, and the additional time is necessary to complete our internal reviews of the document and to formulate a coherent response. I appreciate your courtesy and cooperation in this regard.

If you have any questions or comments regarding the above, please feel free to contact me at your convenience.

Amy L. Dragovich, P.E.
November 4, 1991
Page 2

Otherwise, you should expect to receive Detrex's written comments on or before November 16.

Very truly yours,


Douglas A. Donnell

DAD:dlb

cc: Charles Guy
I. H. Shamiyeh



USEPA

Illinois Environmental Protection Agency P.O. Box 19276, Springfield, IL 62794-9276

217/782-6762

RCRA Log 113

Refer to: 0311860003 -- Cook County
Detrex Corporation, Melrose Park
Facility
ILD074424938
RCRA Permit Log No. 113
RCRA Part B -- Administrative Record

September 25, 1991

Detrex Corporation
Attention: Mr. Daniel Anderson
Branch Manager
2537 LeMoyné Avenue
Melrose Park, Illinois 60160

Clauss Industrial District
Attention: Mr. Richard R. Lareno
Managing Agent
21150 Prestwick Drive
Barrington, Illinois 60010

Gentlemen:

Enclosed is a draft RCRA Hazardous Waste Management Part B permit and fact sheet. The draft permit is based on the administrative record contained in the Agency's files. The contents of the administrative record are described in 35 Illinois Administrative Code (I.A.C.) Section 705.144.

This draft permit is divided into two permits: A RCRA permit issued by IEPA and a Hazardous Waste Management Permit issued by USEPA. The USEPA permit generally contains only those provisions and conditions raised pursuant to the Hazardous and Solid Waste Amendments of 1984 to RCRA (HSWA). The IEPA permit also enforces portions of HSWA where IEPA has authority to do so. Read both documents carefully, failure to meet any portion of either permit could result in civil and/or criminal penalties.

Under the provisions of 35 Illinois Adm. Code 705.141(d), the draft permit and administrative record must be publicly noticed and made available for public comment. The Agency must also provide an opportunity for a public hearing. Copies of the draft decision and fact sheet are available for review at the Melrose Park Public Library, 801 North Broadway, Melrose Park, Illinois 60160. The Agency has not scheduled a public hearing at the current time, however, any interested party may request a public hearing. The public comment period will close on November 9, 1991.

During the comment period, the applicant or any interested party may submit comments to the Agency on the draft permit for the RCRA Hazardous Waste Management permit. Please note that additional information, as specified in condition I.K., must be received by the Agency for review and approval prior to storage of wastes within the hazardous waste container storage area after the effective date of this RCRA Part B Permit. At the close of the comment period, the Agency will prepare a response to significant comments. Comments on the RCRA Part B Permit may be submitted to Keri Luly, Director's Office, Illinois Environmental Protection Agency at 2200 Churchill Road, Post Office Box 19276, Springfield, Illinois 62794-9276.



Page 2

The Agency will issue a final permit decision after the close of the public comment period unless the Agency decides to reverse the tentative decision. This final permit will supercede the requirements of the State Operating Permit No. 1980-44-OP dated April 15, 1981 and revised January 25, 1985.

If you have any questions concerning this draft permit, please contact Amy L. Dragovich, P.E., at 217/782-6762. If you intend to seek review of the USEPA issued permit, please contact USEPA -- Region V Robert Fuhrer at 312/353-4889 concerning the applicable review procedures.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

^{ALD}
LWE:ALD:lat/sp/1518q, 2-3

Attachments: Fact Sheet, Draft Permit

cc: Division File, w/attachment
Maywood Region, w/attachment
USEPA Region V, George Hamper, w/attachment
Amy Dragovich, w/attachment
Planning & Reporting Section
Division of Legal Counsel
RPMS, Jim Janssen
Administrative Record, w/attachment



RCRA Log 113

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

IEPA #0311860003 -- Cook County Issue Date:
USEPA ILD #074424938 Effective Date:
Detrex Corporation, Melrose Park Expiration Date:
Facility
Permit #113
RCRA -- Part B - Administrative Record

Operator

Owner

Detrex Corporation
Attention: Mr. Daniel Anderson
Branch Manager
2537 LeMoyne Avenue
Melrose Park, Illinois 60160

Clauss Industrial District
Attention: Mr. Richard R. Lareno
Managing Agent
21150 Prestwick Drive
Barrington, Illinois 60010

A draft RCRA Part B permit is hereby proposed pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to the Detrex Corporation Melrose Park facility to construct/maintain and operate a waste management facility involved in the storage of hazardous waste. Detrex Corporation is located at 2537 LeMoyne Avenue, Melrose Park, Illinois.

This draft permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 1/2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which is issued. This Permit contains 71 pages including attachments A through E.

If you have any questions regarding this draft permit, please contact Amy L. Dragovich, P.E., at 217/782-6762.

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:ALD:lat/sp/1518q, 1

FACT SHEET
RCRA HAZARDOUS WASTE PART B PERMIT
Detrex Corporation, Melrose Park, Illinois
ILD074424938
LPC #0311860003
Part B Log No. 113

This fact sheet has been prepared pursuant to the requirements of Title 35, Illinois Administrative Code (35 IAC), Section 705.143. The fact sheet is intended to be a brief summary of the principal facts and significant factual, legal, methodological, and policy questions considered in preparing a draft RCRA permit. This permit will allow Detrex Corporation to store hazardous waste in containers at 2537 LeMoyne Avenue, Melrose Park, Illinois. Pursuant to 35 IAC, 705.143(a), this fact sheet is sent to the applicant and to any other person who requests it.

I. INTRODUCTION

The draft permit for Detrex Corporation contains all of the standard conditions required by 35 IAC, Parts 702, 703, and 724; and the applicable conditions of 35 IAC, Part 724 for storage of hazardous waste in containers at 2537 LeMoyne Avenue, Melrose Park, Illinois. Detrex Corporation is an existing facility that has been operating under interim status since November 18, 1980. They have also been operating under a State Operating Permit (1980-44-OP) since April 15, 1981.

II. DESCRIPTION OF FACILITY

A. General

The Detrex Corporation facility is located at 2537 LeMoyne Avenue in Melrose Park, Cook County, Illinois. Detrex Corporation specializes in the sale of halogenated solvents, cleaning equipment, and the collection of solvent wastes generated in degreasing and other cleaning operations. As part of Detrex's business activities, they assist their customers with the removal of their hazardous waste. The facility occupies approximately 0.4 acres. They presently manage only spent halogenated solvents in their hazardous waste container storage area. These wastes may also be characteristically hazardous due to the Toxicity Characteristic Leaching Procedure.—

B. Site Description

The Detrex Corporation facility is located at 2537 LeMoyne Avenue, Melrose Park, Illinois.

III. HAZARDOUS WASTE MANAGEMENT ACTIVITIES

A. Description of Unit

Containers

Containers of hazardous waste are stored in the containerized waste storage area. The container storage area is located indoors, in the northern half of the facility site. The storage area consists of a diked concrete base. The concrete will be coated with a chemical resistant epoxy. The hazardous waste storage area has a containment capacity of 5,948 gallons. The maximum volume of hazardous waste to be stored in the storage area will be 27,500 gallons, corresponding to a maximum of 500 55-gallon drums. A maximum of 300 55-gallon product and/or empty drums will also be stored within the secondary containment area. Waste drums are transferred from in-coming trucks to the containerized waste storage area by facility employees. Waste which may be stored in the containerized waste storage area are hazardous wastes as identified in Table C-1 of the permit application.

Container permit conditions deal with properly managing the containers in accordance with the procedures and operating specifications; and constructing, operating, and maintaining the containment system in accordance with the design plans and operating specifications. Permit Conditions in Section I are specific to container storage and implement the regulatory requirements of 35 IAC Part 724, Subpart I.

B. STANDARD PERMIT CONDITIONS

Standard Permit Conditions 1 to 62 are regulatory requirements of 35 IAC, Parts 702, 703 and 724. These conditions are of a general nature and are applicable to all Hazardous Waste Management facilities regulated pursuant to an IEPA RCRA permit. These conditions include the effectiveness of the permit, permit actions, severability, permit expiration, monitoring and retention of records, transfer of permits, and compliance schedules.

IV. SOLID WASTE MANAGEMENT UNITS

Section 3004 of the Resource Conservation and Recovery Act (RCRA) and 35 IAC 724.201 requires that RCRA permits issued for the management of hazardous wastes at a given facility also include procedures to investigate for and correct any problems associated with the management

(past, present, or future) of solid wastes managed at the permitted facility. Therefore, Section III of this permit has been developed to require Detrex Corporation to investigate for releases from four (4) solid waste management units (SWMUs) at this facility and to carry out any corrective actions necessary to protect human health and the environment from such releases. This section also places requirements on Detrex Corporation to report, investigate and correct any releases discovered at this facility in the future.

V. CONSIDERED PERMIT ACTIONS OTHER THAN RCRA

A. Air

The air emissions from a hazardous waste management facility are regulated under RCRA, and the Clean Air Act (CAA) the Illinois' Environmental Protection Act and State regulations at Title 35: Environmental Protection, Subtitle B: Air Pollution. Under these regulations, it is required to obtain a permit to install or operate any process which is, or may be, a source of air pollutants.

B. Water

A discharge of any waste waters from a hazardous waste management facility into the waters of the State, is required to have a National Pollutant Discharge Elimination System (NPDES) permit, issued by the Agency under Section 39(b) of the Environmental Protection Act.

VI. PROCEDURES FOR REACHING A FINAL DECISION

Pursuant to 35 IAC 705.162(a)(2), the public is given forty-five (45) days to review the application and comment on the draft Permit conditions prior to IEPA taking any final permitting action on the application for this RCRA Hazardous Waste Management Permit. The comment period will begin on September 25, 1991, the date of publication of the public notice in a major local newspaper of general circulation. The comment period will end on November 9, 1991. When the Agency makes its final Permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final Permit decision. The Permit will become effective thirty-five (35) days after service of notice of the decision or at a later date if stated in the Permit. In addition, copies of the draft permit and fact sheet are available for review at the other locations to be identified in the Public Notice.

Any interested person may submit written comments on the draft permit, or request a public hearing, at the following address:

Illinois Environmental Protection Agency
Government and Community Affairs Section, Director's Office
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

The administrative record is open for public inspection at the IEPA Springfield headquarters from 8:30 a.m. to 5:00 p.m., Monday through Friday. The administrative record contains the Permit application, fact sheet, and other supporting documents and correspondence submitted to the IEPA. Inspections of the administrative record must be scheduled in advance by contacting the Public Notice Clerk at the above address.

In response to requests received during the comment period or at the discretion of the IEPA, a public hearing may be held to clarify one or more issues concerning the Permit application. A request for a public hearing must be in writing and shall state the nature of the issues proposed to be raised in the hearing. Public notice will be issued forty-five (45) days before any public hearing. If a hearing has been scheduled with the public notice, then further requests are not necessary.

For further information, please contact Keri Luly, Director's Office, Illinois Environmental Protection Agency at 2200 Churchill Road, Post Office Box 19276, Springfield, Illinois 62794-9276 or by telephone at 217/782-5562.

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

DETREX CORPORATION (Operator)

And

CLAUSS INDUSTRIAL DISTRICT (Owner)

Melrose Park, Illinois

LPC #0311860003 -- Cook County

ILD074424938

Permit Log No. #113

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Section I CONTAINERS

A. SUMMARY

Containers of hazardous waste shall be stored in the hazardous waste storage area. The hazardous waste storage area is located indoors, in the northern half of the facility site. The hazardous waste storage area consists of a diked concrete base. The concrete shall be coated with a chemical resistant epoxy. The hazardous waste storage area shall have a containment capacity of at least 5,948 gallons. This containment capacity is adequate to contain at least 10 percent of the volume of the hazardous waste and product containers to be stored within the secondary containment system. The maximum volume of hazardous waste to be stored in the hazardous waste storage area shall be 27,500 gallons, corresponding to a maximum of 500 55-gallon drums. A maximum of 300 55-gallon product and/or empty drums may also be stored within the secondary containment area. The only waste which may be stored in the hazardous waste storage area are hazardous wastes as identified in Table C-1 of the approved permit application.

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall be performed in the approved storage area shown as the hazardous waste container storage area on Attachment D-1 of the approved permit application.
2. The Permittee may only store the hazardous wastes identified in Table C-1 of the approved permit application in the container storage area. A maximum of 27,500 gallons of waste may be stored in the container storage area. The hazardous waste codes for those wastes are listed in Attachment A to this permit.
3. The Permittee is prohibited from storing waste (hazardous or non-hazardous) in the permitted unit that is not identified in Condition B. 2. above.
4. Prior to the shipment of any drummed waste to Detrex from a new customer, a preliminary assessment of the waste shall be conducted at the generator's facility. This preliminary assessment shall include analysis of a waste sample for specific gravity, ignitability and a visual inspection of a full depth sample, using a coliwasa, to determine color and phases. A representative sample shall then be sent to the laboratory and analyzed for specific gravity, ignitability, TCLP metals and organics. This sampling shall be conducted by Detrex's personnel, the drum sealed and all results recorded in Detrex's operating record.
5. Detrex shall not accept wastes with a solvent content less than 30%.

6. Prior to storing drums of waste in the hazardous waste container storage area, all drums shall be visually inspected and analyzed for specific gravity and ignitability and the results compared to the one recorded during the preliminary assessment. If a discrepancy is found, the waste shall not be accepted at the facility prior to reanalysis. If the specific gravity, ignitability, and visual inspection is consistent with previous analysis, the drums may be stored at the facility while a sample is being sent off-site for analysis of organics.
7. A minimum of one sample per customer and ten (10) percent of the containers received daily shall be analyzed for organics. Analysis for organics shall include all of the hazardous constituents for the volatile organics identified in Table C-1 of the approved permit application and Attachment A to this permit.
8. Samples which will be tested for volatile organics shall not be composited because of the volatilization which may result from any compositing method.
9. Once a year a sample from each waste stream from each customer shall be sent off-site to the laboratory for analysis of specific gravity, organics, ignitability, and the TCLP metals. For existing customers, this analysis shall be conducted within ninety (90) days of receipt of the waste stream from off-site or within ninety (90) days after the effective date of this permit if the waste stream is in storage at the hazardous waste container storage area on the effective date of this permit.
10. Analysis for ignitability shall be conducted in accordance with ASTM D-93 or ASTM D-3228 (35 IAC Section 721.121 (a)(1)).
11. A coliwasa sampler shall be used to obtain a representative sample from each drum.
12. A maximum of 300 product and empty drums may be maintained within the secondary containment system. The drums shall only contain the hazardous constituents permitted for storage in the hazardous waste storage area and shall not contain materials that are incompatible with any waste or other materials stored nearby in other containers unless separated from the other material and protected from them by means of a dike, berm, wall, or other devices. In addition, containers of ignitable and combustible (NFPA definition) product shall be stored in an area separate from the area where all other wastes or product are stored.
13. In addition to using the chemical compatibility chart included as Attachment C-4 in the approved permit application, Detrex shall

assess the containerized storage compatibility by performing a Liquid Waste Compatibility Test on the waste and product received for container storage in this storage unit with a composite sample aggregating all wastes and products stored in the secondary containment system of the hazardous waste container storage area. If the incoming sample passes the Liquid Waste Compatibility criteria, an aliquot of the incoming sample shall be added to the composite to create a compatibility composite for the next waste. The Liquid Compatibility Test shall be performed in accordance with ASTM Test Method D5058. This test shall apply to both solid and liquid containerized waste and product. A new composite sample shall be created at least once a week.

14. The frequency of duplicate, blank, and spiked samples shall be consistent with the latest edition of SW-846.

C. CONDITION OF CONTAINERS -- If a container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste or product from this container to a container that is in good condition or manage the waste in accordance with the approved permit application.

D. COMPATIBILITY OF WASTE WITH CONTAINERS -- The Permittee must use a container made of or lined with material which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

E. MANAGEMENT OF CONTAINERS -- The Permittee shall comply with the following management practices:

1. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must always be closed during storage, except when it is necessary to add or remove waste.
2. A container holding hazardous waste or product which is being stored in the hazardous waste secondary containment system must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

F. INSPECTION

The Permittee shall inspect the container area weekly, in accordance with the inspection schedule, specified in Attachment D, to detect leaks and deterioration of containers and the containment system caused by corrosion or other factors. The containment system shall be repaired or recoated as soon as possible, if the inspection determines the concrete

sealant has deteriorated. Detrex shall perform a complete inspection of the concrete sealant yearly and perform annual maintenance to insure the integrity of the lining.

- G. CONTAINMENT -- The Permittee shall construct, operate, and maintain the containment system according to the design plans and operating specifications contained in the approved permit application.
- H. CLOSURE -- At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the containment system. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:
1. The Permittee shall notify the Agency's DLPC in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the storage area has been properly decontaminated. This plan must be approved by the Agency's DLPC in writing prior to being implemented. Agency review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from the Agency will approve and establish:
 - a. The sampling and decontamination plan;
 - b. What contaminants must be analyzed for;
 - c. Analytical requirements (SW-846 Methods should be utilized); and
 - d. The level at which decontamination or removal is considered complete.
 2. All sweepings, washwater and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721.
 3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements

cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
6. Within sixty (60) days after closure of the container storage area is complete, the Permittee shall submit certification to the Agency that the unit has been closed in accordance with the approved closure plan.

The closure certification forms in Attachment C to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until the Agency approves the closure certification for the unit. The Agency's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- c. Copies of the waste manifests.

- d. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.
 - e. A chronological summary of closure activities and the cost involved.
 - f. Tests performed; methods and results.
 - g. Color photographs of closure activities which document conditions before, during and after closure.
 - h. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
9. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to

the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

I. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE

1. The Permittee shall not locate containers which hold ignitable or reactive waste within 50 feet of the facility's property line.
2. The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.

Ignitable or reactive wastes must be separated and protected from sources of ignition or reaction including but not limited to:

- a. Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (e.g., static, electrical, or mechanical), spontaneous ignition (e.g., from heat producing chemical reactions), and radiant heat.
- b. While ignitable or reactive waste is being handled, the Permittee must confine smoking and open flame to specially designated locations.
- c. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

J. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same container, unless the procedures specified in the approved permit application are followed.

Incompatible wastes or materials must not be placed in the same container unless precautions are taken to prevent reactions which:

- a. Generate extreme heat or pressure, fire or explosions, or violent reactions
- b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment
- c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions
- d. Damage the structural integrity of the device or facility

- e. Through other like means, threaten human health or the environment.

The basic methods for preventing such reactions are to:

- a. Treat one or both of the incompatible wastes/materials to render them compatible prior to placing them in the container
 - b. Physically separate the incompatible wastes/materials in the containers so that it is not possible for the incompatible wastes/materials to come in contact with each other.
- 2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
 - 3. The Permittee shall not store containers holding a hazardous waste or product that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments unless separated from the other material or protected from them by means of a dike, berm, wall, or other devices.

K. GENERAL CONSTRUCTION REQUIREMENTS

Detrex shall select a chemical resistant epoxy and submit the specifications for the coating and a proposed installation schedule to the Agency for approval within ninety (90) days after the effective date of this permit. Upon written approval by the Agency of the chemical resistant epoxy, the Permittee is hereby authorized to install the epoxy coating and sealant in the container storage area. The container storage area may only be constructed in accordance with the approved permit application, subject to the following modifications:

- 1. Within thirty days after completing the installation of the epoxy coating and sealant and prior to any container of waste being placed or stored in the container storage area, the Permittee shall submit to the Agency a certification from a qualified, registered professional engineer, demonstrating that the container storage area meets the requirements of 35 IAC 724.275(b). This certification document shall contain the information required in Attachment B and a statement that the base is free of cracks or gaps.
- 2. The Permittee may not store wastes until the construction certification is approved. The Agency shall review the certification described above to ensure the container storage area and its secondary containment meets the requirements of 35 IAC 724.292 and 724.293. The Agency will respond with any comments to this certification in writing within forty-five days from the receipt of

this certification, the permittee may consider the certification approved. The Agency review of this certification will be subject to the appeal provisions contained in Section 39(a) and 40(a) of the Illinois Environmental Protection Act.

L. CONTINGENCY PLAN - ADDITIONAL SPECIAL CONDITIONS

1. The Permittee shall implement the facility contingency plan contained in the approved permit application any time there is (1) a release of hazardous waste or product (only applies to products being stored in the hazardous waste secondary containment system), or (2) a fire or explosion which involves hazardous waste or which occurs in areas where hazardous wastes are treated, stored or disposed.
2. The Permittee shall contact the local emergency response entities as soon as possible after implementation of the contingency plan:
 - a. The entities which must be notified include:
 1. Melrose Park Fire Department
 2. Melrose Park Police Department
 3. Local ESDA Coordinator
 - b. The information which must be initially relayed to each entity includes:
 1. The type of emergency (release, fire or explosion);
 2. The type of wastes or product involved in the emergency and the approximate quantity involved;
 3. An initial assessment of the conditions at the site;
 - c. If the Permittee is able to properly respond to the emergency without any aid from the entities identified in Condition 2.a above, the Permittee shall notify each of these entities that the emergency situation no longer exists once all required emergency response and cleanup activities have been completed. This condition does not preclude the need to initially notify the entities in 2.a above.
3. Within 60 days of the effective date of this permit, the Permittee shall demonstrate to the Agency that the following information has been provided to the local fire department, the local police

department and all other agencies identified in 35 IAC 724.153(b)
(Note that this information must be provided to these entities to
ensure the requirements of 35 IAC 724.137 are met):

- a. A list of all hazardous wastes to be managed at the facility
(generic name), including the EPA hazardous waste number;
- b. A scaled drawing showing the location of all hazardous waste
management units at the facility and all other areas where
hazardous waste is handled at the facility (such as
loading/unloading areas, etc.). This scaled drawing must also
identify the entrances to the facility, roads within the
facility and possible evacuation routes;
- c. A description of the types of hazardous waste and products
managed at each hazardous waste management unit at the facility;
- d. A description of the procedures used to handle hazardous waste
at the facility;
- e. An estimate of the quantity of the various types of hazardous
wastes which may be present at the facility. An estimate of the
typical inventory of hazardous wastes at the facility must also
be included;
- f. The following information regarding the properties of the
hazardous wastes managed at the facility and the products to be
stored in the hazardous waste secondary containment system:

Name
USEPA Hazardous Waste No.
IDLH
TLVs (TLV-TWA, TLV-STEL, TLV-C)
Vapor Pressure at 68 F (20 C)
NFPA Designation (flammable or combustible)
Material Safety Data Sheets
Other appropriate characteristics (such as
reactive class, etc.) USDOT classification.

- g. An identification of the products of incomplete combustion
associated with (1) flammable or combustible (NFPA definition)
hazardous wastes managed at the facility and (2) wastes managed
at the facility which are hazardous due to the characteristic of
ignitability (D001) or reactivity (D003). This shall include
products to be stored in the hazardous waste secondary
containment system.

4. Within 60 days of the effective date of this permit, the Permittee shall provide documentation to the Agency that the agreements and arrangements identified below have been made. Where necessary, documentation must be provided that any agency identified in 35 IAC 724.153(b) declined to enter into an agreement or arrangement. The specific arrangements and agreements which must be made include:
 - a. Arrangements to familiarize the local police department, local fire departments and other local emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes.
 - b. Agreements designating primary emergency authority to a specific police department and a specific fire department, where more than one police department and fire department might respond to an emergency. Agreements should also be made with the other surrounding police and fire departments to provide support to the primary emergency authorities;
 - c. Agreements with state emergency response teams, emergency response contractors and equipment suppliers;
 - d. Agreements to familiarize local hospitals with the properties of the hazardous wastes handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.
 - e. Arrangements to identify a single local emergency response agency as the primary agency which will coordinate activities required by these agencies during an emergency at the facility.

The facility should also attempt to develop emergency plans and coordination agreements with the state and local emergency entities identified above. The detail of the arrangements made with the local and state emergency entities will be dependent upon the types of wastes handled at the facility and the potential need for the services of the various entities.

5. The Permittee shall review all components of the contingency plan with the local emergency response entities at least once every twelve months. Copies of the meeting notes and list of attendees shall be placed in the facility's operating record and be available to the Agency for review upon verbal or written request.

6. The Permittee shall modify the contingency plan to describe in detail the possible hazards to human health or the environment that may result from any hazardous waste (and products to be stored in the hazardous waste secondary containment system) related emergency (release, fire, or explosion). This information is necessary for the emergency coordinator to make a proper assessment of the emergency as required by 35 IAC 724.156(c) and (d). Specifically, the contingency plan must describe the hazards associated with releases and possible fires involving various hazardous wastes (and products to be stored in the hazardous waste secondary containment system) managed at the facility and the real impacts of such emergencies. Information which must be incorporated into the contingency plan includes:
 - a. The information identified in Condition 3 above.
 - b. An evaluation of the hazards associated with a release or possible fire involving the various hazardous wastes which may be managed at the facility.
 - c. An evaluation of the area which may potentially be impacted during a release or possible fire involving the various hazardous wastes (and products to be stored in the hazardous waste secondary containment system) managed at the facility.

The information to be incorporated into the contingency plan, as required by this condition, must first be approved in writing by the Agency. A revised contingency plan which incorporates the required information must be submitted to the Agency within sixty (60) days of the effective date of this permit.

7. If it is determined that adverse off-site impacts are possible as a result of a release, fire or explosion involving hazardous wastes (and products to be stored in the hazardous waste secondary containment system) at the facility, the Emergency Coordinator shall assess the "hazard potential" associated with the existing conditions of the facility at the beginning of each operating shift. The items which must be considered in this assessment include (1) the weather conditions (wind speed, wind direction, atmospheric stability, etc.) and associated dispersion characteristics of the atmospheric conditions, (2) the volume of the various types of hazardous wastes present at the facility, (3) the hazardous characteristics of the wastes on-site, including the products of combustion which may be produced in the event of a fire, (4) the emergency situations which may occur that day and (5) the waste management activities expected to be carried out that day. An evaluation of the potential off-site impacts through the use of commercially available models should also be completed as part of the assessment. The IEPA is currently using the computer based model

titled "ARCHIE" which is available from the Federal Emergency Management Agency (202/643-3484). These evaluations shall be documented in the operating record and be readily available for review by the Emergency Coordinator and the emergency response agencies in the event of an emergency.

M. SPECIAL REQUIREMENTS FOR IGNITABLE AND COMBUSTIBLE WASTES

The Permittee shall store containers of ignitable and combustible (NFPA definition) wastes (or product to be stored in the hazardous waste secondary containment system) in an area separate from the area where all other wastes or product are stored. This separation shall be in addition to the separation of incompatibles required by 35 IAC 724.277.

Section II STANDARD CONDITIONS

GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 IAC 702.142 and 703.125)

7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 35 IAC 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 IAC 702.125.
8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to the Agency, within a reasonable time, any relevant information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

13. MONITORING AND RECORDS. (35 IAC 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical technique(s) or method(s) used; and
 - vi. The result(s) of such analyses. (35 IAC 702.150)

14. REPORTING PLANNED CHANGES. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:
 - a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - b.
 1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
 2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))
15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:
 - i. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - ii. Either:
 - a. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - b. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from the Agency of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 702.152(b) and 703.247)

16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))
17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))
18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))
19. TWENTY-FOUR HOUR REPORTING.
 - a. The Permittee shall report to the Agency any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
 - b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))
- 20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
- 21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
- 22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
 - a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
 - b. Unmanifested waste report: The permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)
 - c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)

23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency
Division of Land Pollution Control #24
Planning and Reporting Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)
25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.
26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
- a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
 - b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
 - c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
 - d. Closure plan as required by 35 IAC 724.212(a) and this permit.
 - e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
 - f. Operating record as required by 35 IAC 724.173 and this permit.
 - g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.
27. WASTE MINIMIZATION. The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

GENERAL FACILITY STANDARDS

28. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify the Agency in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. NOTICE OF WASTE FROM OFF-SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
- 30. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. SECURITY. The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE. The Permittee shall comply with the requirements of 35 IAC 724.117.

PREPAREDNESS AND PREVENTION

35. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)
36. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.

37. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

CONTINGENCY PLAN

41. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Agency as required by 35 IAC 724.156(j).
42. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 IAC 724.153.
43. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
44. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

45. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172 and 724.176.
46. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
47. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

CLOSURE

48. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
49. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
50. NOTIFICATION OF CLOSURE. The Permittee shall notify the Agency at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
51. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
52. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
53. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to the Agency in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
54. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.

- b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
 - c. Kept on record at the facility and updated. (35 IAC 724.242)
55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 IAC 724.243.
56. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 IAC 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

58. DISPOSAL PROHIBITION. Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with nonrestricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
59. DILUTION PROHIBITION. The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).
60. WASTE ANALYSIS.
- 1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

61. STORAGE RESTRICTIONS

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

62. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

Section III CORRECTIVE ACTION

- A. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such necessary corrective action as to protect human health and the environment from all releases of hazardous wastes and hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at its Melrose Park, Illinois facility.
- B. The Permittee shall submit to the Illinois Environmental Protection Agency's Division of Land Pollution Control (Agency's DLPC) Permit Section, within ninety (90) days after the effective date of this permit, a written RCRA Facility Investigation (RFI) Phase I Workplan to document the absence or presence of hazardous waste or hazardous constituents in the groundwater, surface water, sediments, soils, and air from the following solid waste management units. This is a listing of SWMUs identified in the RCRA Facility Assessment (RFA) that must be addressed in the RFI and is not a complete listing of SWMUs at the subject facility.
1. Waste Handling Area, at truck dock;
 2. Fuel Oil Spill Area, located outside on the west side of facility building;
 3. Tank Car Unloading Area, located along the railroad tracks on northern edge of the facility property; and
 4. Possible Leaking Underground Storage Tank, adjacent to the facility building at the entrance to the concrete drive.

The requirements for this RFI Phase I Workplan are outlined in Attachment E. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase I Workplan. Within 30 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval. Within 30 days of the Agency's DLPC approval of the RFI Phase I Workplan, the Permittee shall begin implementing the Workplan according to the terms and schedule in the Workplan.

- C. If the Agency's DLPC determines, based on the data obtained from the Phase I Workplan, that there has been no release of hazardous waste or hazardous constituents to the environment from the SWMU(s) identified above, no further action will be required for the SWMU(s). If the Agency's DLPC determines, based on the data, that there has been a release of hazardous waste or hazardous constituents to the environment or that the data is inconclusive, the Permittee will be notified by the Agency's DLPC. The

Permittee must then submit a RFI Phase II Workplan to determine the rate and extent of migration of hazardous waste or hazardous constituents and the concentrations of the hazardous waste or hazardous constituents in the groundwater, surface water, sediments, soils, and air. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase II Workplan. Within 30 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval. Within 30 days of the Agency's DLPC approval of the RFI Phase II Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established by the Agency.

- D. The Agency's DLPC will determine, based on the RFI Phase II final report, whether corrective measures are necessary for the SWMU(s) addressed in the RFI. If the Agency's DLPC determines that corrective measures are not necessary, no further investigative action or corrective action will be required for the SWMU(s) addressed in the RFI. If corrective measures are determined to be necessary, the Agency's DLPC will notify the Permittee in writing and will identify target cleanup objectives that any corrective measures would be expected to meet. Within 120 days of receipt of this written notification, the Permittee shall submit to the Agency's DLPC a Corrective Action Plan (CAP). The purpose of the CAP is to develop and evaluate corrective action alternative(s) and to outline one or more alternative corrective measure(s) which will satisfy the target cleanup objectives specified by the Agency's DLPC. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the CAP. Within 60 days of receipt of such comments, the Permittee must modify the CAP or submit a new CAP for the Agency's DLPC approval. The Agency's DLPC approval of one or more of the corrective measure(s) will consider performance, reliability, implementability, safety, human health and environmental impact of the measure(s). The formal approval and incorporation of the selected corrective measure(s) into the Part B Permit will be via the Class 2 Permit Modification procedures identified in 35 IAC 703.282. The Permittee shall begin implementing the selected corrective measure(s) according to the terms and schedule identified in the modified permit.

E. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such cost estimate will be based upon the cost of construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) and the cost of undertaking

at least the RFI, to meet the requirements of 35 IAC 724.201, Attachment E and this permit. This cost estimate must be submitted to the Agency's DLPC and revised according to the following schedule.

Facility Submission

Due Date

Initial Cost Estimate (with the RFI Phase I Workplan)

90 Days after effective date of this permit

Revised Cost Estimate (with the initial submittal of the RFI Report)

To be established by the Agency following approval of the RFI workplan

2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition E.1. The words "completion of corrective action" shall be substituted for "closure and/or post-closure," as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the submittal of the initial or revised cost estimates required under Condition E.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 35 IAC 724.246 at its discretion.

F. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) (i.e., a unit not specifically identified during the RFA), discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than fifteen (15) calendar days after discovery.
2. After such notification, the Agency's DLPC may request, in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit.

3. Within sixty (60) calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall prepare a SWMU Assessment Plan for determining past and present operations at the unit, as well as any sampling and analysis of ground water, land surface and subsurface strata, surface water or air, as necessary to determine whether a release of hazardous waste or hazardous constituents from such unit(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.
4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with modifications, or disapprove the Plan in writing.

If the Agency's DLPC approves the Plan, the Permittee shall begin to implement the Plan within fifteen (15) calendar days of receiving such written notification.

If the Agency's DLPC disapproves the Plan, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan.

5. The Permittee shall submit a SWMU Assessment Report to the Agency's DLPC no later than fifteen (15) calendar days from completion of the work specified in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan. At a minimum, the Report shall provide the following information for each newly-identified SWMU:
 - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
 - b. The type and past and present function of the unit;
 - c. The general dimensions, capacities, and structural description of the unit (supply any available drawings and specifications);
 - d. The period during which the unit was operated;
 - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and

- f. The results of any sampling and analysis required for the purpose of determining whether releases of hazardous wastes or hazardous constituents have occurred, are occurring, or are likely to occur from the unit.
6. Based on the results of this Report, the Agency's DLPC shall determine the need for further investigations at specific unit(s) covered in the SWMU Assessment. If the Agency's DLPC determines that such investigations are needed, the Agency's DLPC may require the Permittee to prepare a plan for such investigations. This plan will be reviewed for approval as part of a RFI Workplan.

G. FUTURE RELEASES FROM SWMUs

Whenever the Permittee becomes aware that any SWMU, that was not found to be releasing hazardous waste or hazardous constituents during the RFI, or was not addressed under the corrective action requirements of this permit, may have started to release hazardous waste or hazardous constituents, the Permittee shall report this information to the Agency's DLPC in writing within 15 days of discovery. The Permittee shall determine the nature and extent of the contamination by following the procedures set forth in Conditions B through E, beginning on the date of notification, rather than the effective date of the permit.

H. COMPLETION OF CORRECTIVE ACTION

The Permittee shall complete corrective action for all releases of hazardous waste or hazardous constituents from the SWMU's specified in Condition B, or from any other SWMU at the facility, as necessary to protect human health and the environment. The Permittee may request to Agency's DLPC to consider corrective action complete at any point during compliance with this permit. The petition should include a demonstration of the following:

1. The Permittee shall demonstrate that there have been no releases and shall also describe how releases will be prevented in the future, of hazardous waste or hazardous constituents to any media from the SWMUs; or
2. The Permittee shall demonstrate that all releases of hazardous waste or hazardous constituents to all media have been remediated to Agency approved target cleanup objectives and shall also describe how releases will be prevented in the future; or

3. Some combination of the above demonstrations; and
4. Appropriate documentation and certification.

The Permittee shall be notified in writing if the Agency's DLPC approves the request that the corrective action can be considered complete. The notification from the Agency's DLPC to the Permittee may include a release from the financial requirements of Condition E.

A determination of no further action shall not preclude the Agency's DLPC from requiring continued or periodic inspections of the SWMU(s) or continued or periodic monitoring of air, soil, ground water, or surface water, when site-specific circumstances indicate that releases of hazardous wastes including hazardous constituents are likely to occur, if necessary to protect human health and the environment.

A determination of no further action shall not preclude the Agency's DLPC from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health or the environment. In such a case, the Agency's DLPC shall initiate a permit modification to rescind the determination of no further action.

SECTION IV
REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section I: CONTAINER STORAGE		
K.	Submit specification for chemical resistant epoxy and proposed installation schedule.	Within 90 days after the effective date of this permit.
K.	Submit certification documentation for construction to the Agency.	Within 30 Days after completion of new container storage area construction.
H.1.	Notify Agency of intent to close container storage area.	At least 180 days prior to commencement of closure.
H.1.	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
H.4.	Submit application for modification of permit and closure and post-closure care plan.	No later than 60 days after determination that container storage area cannot be clean closed.
H.5.	Update financial assurance.	No later than 30 days after permit modification is effective.
H.6.	Submit certification for closure of container storage area.	No later than 60 days after closure of container storage area is complete.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
Section II: STANDARD CONDITIONS		
6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Agency and copies of records required to be kept by this permit.	Reasonable time.
14	Notify Agency of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Agency of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Agency any non-compliance which may endanger health or environment.	
	telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
28	Notify Agency in writing of expected receipt of hazardous waste from foreign source.	At least 4 weeks prior to receipt of waste.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
41	Implementation of Contingency Plan. Notify appropriate state and local agencies with designated response roles. Notify appropriate local officials.	As needed. Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable.
	Notify the Agency (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion which could threaten human health or the environment, outside the facility.	Immediately after determination made.
	Notify Agency and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h).	Prior to resuming operation in affected areas.
	Report to Agency details regarding incident which required implementation of contingency plan.	Within 15 days after event.
47	Submit annual report required by 35 IAC 724.175.	March 1 of each year.
49	Application for permit modification amending closure plan.	
50	Notify Agency that expecting to close.	At least 180 days prior to beginning closure.
54(a)	Adjust closure cost estimate for inflation.	Within 30 days after anniversary date.
54(b)	Revision of closure cost estimate.	As needed.

<u>Condition</u>	<u>Submittal</u>	<u>Due Date</u>
55	Change in financial assurance mechanism for closure.	
56	Change in coverage for sudden and non-sudden accidental occurrences.	
57	Notify Agency of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding.
Section III: CORRECTIVE ACTIONS		
B	RCRA Facility Investigation (RFI) Phase I Workplan	Within 90 days after the effective date of this permit.

Section V SPECIAL CONDITIONS

1. All hazardous and non-hazardous special wastes generated by this facility and transported off-site for recycling, treatment or disposal must be transported in accordance with the special waste stream permit and Illinois manifest system, the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809, and the conditions of the applicable waste stream permits.
2. Special wastes received at the site for storage/transfer shall be transported to the facility utilizing the Agency's special waste authorization system and manifest system.
3. All loading/unloading of special wastes shall be accomplished over spill containment devices which are constructed of non earthen materials and have been coated with a compatible impermeable coating and has been sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation.
4. Detrex shall select a coating or lining and submit the specifications for the coating and a proposed installation schedule to the Agency for approval within ninety (90) days after the effective date of this permit.
5. The Permittee shall provide the spill containment devices, the curbs and walls that are used as containment, with an impermeable surface coating or lining that:
 - a. is compatible with the waste, or any other liquid, stored in the containment system, and
 - b. will prevent migration of the waste into the concrete of the slab, wall or curb.
6. Detrex shall perform a complete inspection of the surface coating or lining yearly and perform annual maintenance to insure the integrity of the coating.
7. It shall not be an act of non-compliance if the coating or lining has been installed properly but does not live up to the manufacture's printed performance standards and/or if the coating or lining fails due to excessive wear or chemical breakdown. The Permittee shall notify the Agency within thirty (30) days of becoming aware of the failure. The facility shall request modification of its permit to install a new coating within 180 days.

8. The Permittee shall construct concrete slabs, walls and curbs that are used as containment with chemical-resistant water stops in place at all joints or install a compatible caulking or sealant at each existing joint. These joints include but are not limited to, all construction joints within the slab, walls and curbs and joints between the slab and curb, between two curbs, between the slab or curb and wall, and joints between two walls. The water stops, caulking or sealant shall be compatible with the transferred waste.
9. The areas where tank trucks are unloading shall be inspected after each use. Any release of waste observed during these inspections must be responded to immediately. Such response shall include containing and collecting the released material and removing all contaminated material.
10. Detrex shall cover the manhole located in the driveway with a polypropylene cover before loading/unloading of special waste.

ATTACHMENT A

WASTE LISTS AND HAZARDOUS WASTE
IDENTIFICATION NUMBERS

ILD074424938

LPC #0311860003

Part B Log #113

ATTACHMENT A

EPA HAZARDOUS WASTE NO.

HAZARDOUS WASTE
BASED ON TOXICITY
CHARACTERISTICS

D004	Arsenic
D005	Barium
D018	Benzene
D006	Cadmium
D019	Carbon Tetrachloride
D021	Chlorobenzene
D022	Chloroform
D007	Chromium
D027	1,4-Dichlorobenzene
D028	1,2-Dichloroethane
D029	1,1-Dichloroethylene
D030	2,4-Dinitrotoluene
D034	Hexachloroethane
D008	Lead
D009	Mercury
D035	Methyl ethyl ketone
D036	Nitrobenzene
D038	Pyridine
D010	Selenium
D011	Silver
D039	Tetrachloroethylene
D040	Trichloroethylene
D043	Vinyl Chloride

EPA HAZARDOUS WASTE NO.

F001

HAZARDOUS WASTE

The following spent halogenated solvents used in degreasing tetrachloroethylene, trichloroethylene, methylene chloride, and 1,1,1-trichloroethane; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

F002

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, and 1,1,2-trichloro-1,2,2-trifluoroethane; all spent solvent mixtures and blends containing before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

ATTACHMENT B
CERTIFICATION DOCUMENTATION
FOR CONSTRUCTION

ILD074424938

LPC #0311860003

Part B Log #113

When submitting certifications required by this Part B permit for construction of any new unit, please complete the attached certification form. This will help to ensure that the submittal reaches its proper destination and the certification will meet the regulatory requirements. Sending the Field Operations Section (F.O.S.) copy directly to the Field Office is acceptable as long as all copies have a completed copy of the enclosed form attached and you advise the Permit Section, in writing, that a copy has been sent to F.O.S.

A documentation report and as-built drawings (sealed and signed by an Illinois Professional Engineer) must be included with this certification. Information necessary to document the construction of the unit and to support the certification must be contained within the report. This report should include a thorough description of all construction data and drawings and should be formatted in a logical and orderly manner. The construction documentation report must contain at least the following items:

1. An introduction and summary which describes the scope and purpose of the project;
2. A description of all construction activities, including quality assurance and quality control;
3. As-built drawings of the unit and a description of any deviations from the plans and specifications approved in the permit;
4. A description of the test methods used and justification for any deviations from standard test methods;
5. A summary of test results, identification of any samples which did not meet the specifications and the corrective action and retesting which was undertaken in response to any failing test results;
6. Any necessary information associated with construction of the unit to document that construction was in accordance with the plans and specifications approved by the permit;
7. Information specifically required by the permit; and
8. Any available photographs of the unit.

CERTIFICATION

This statement is to be completed by both the responsible officer and the registered professional engineer upon completion of construction in accordance with 35 IAC Section 702.126. Submit one copy of the certification with original signatures and two additional copies. Forward these certification statements and any information required by the permit to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

FACILITY NAME: Detrex Corporation, Melrose Park, Illinois

IEPA SITE CODE: LPC #0311860003

U.S. EPA ID NO.: ILD074424938

PART B PERMIT LOG #113

PERMIT (OR MODIFICATION) ISSUANCE DATE:

PERMIT CONDITION NO. REQUIRING CERTIFICATION:

The _____ has been constructed in accordance with the specifications in the Part B. Documentation that the construction was in accordance with the permit is contained in the enclosed report. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registered Number

Date

(P.E. Seal)

ATTACHMENT C

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Name and Title

Signature of Registered P.E.

Name of Registered P.E. and
Illinois Registration Number

Date

TABLE I: INSPECTION SCHEDULE
FOR HAZARDOUS WASTE STORAGE AREA

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Check container placement, stacking, aisle space and segregation	Daily	Visual
2. Check containers for adequate seals, open lids, and loose bungs	Daily	Visual
3. Check container labels	Daily	Visual
4. Check containers for corrosion, leaks, deformation	Daily	Visual
5. Check pallets for damage	Daily	Visual
6. Check the concrete floor for cracks, deterioration, wet spots	Weekly	Visual
7. Check the concrete ramps and curbs for settlement, cracks, wet spots	Weekly	Visual
8. Check the containment system for spills, leaks, stains	Weekly	Visual
9. Check the locks on gates and doors	Daily	Visual/Physical
10. Check the warning signs	Weekly	Visual
11. Check the loading/unloading area for obstructions, spills, leaks, stains	Daily (When in use)	Visual

TABLE II: INSPECTION SCHEDULE
FOR EMERGENCY AND SAFETY EQUIPMENT

<u>Inspection Item</u>	<u>Frequency</u>	<u>Procedure</u>
1. Absorbent Material	Weekly	Visual
2. Forklift	Weekly	Visual/Physical
3. Fire Extinguishers	Weekly	Visual
4. First Aid Kit	Weekly	Visual
5. Eye Wash Station/ Safety Shower	Weekly	Visual/Physical
6. Respirator	Weekly	Visual
7. Self-contained Breathing Apparatus	Weekly	Visual/Physical
8. Protective Clothing	Weekly	Visual
9. Intercom	Daily	Visual/Physical
10. Alarm System	Monthly	Visual/Physical
11. Sump Pump	Weekly	Visual/Physical
12. Polypropylene Pad	Weekly	Visual

ATTACHMENT E

REQUIRED SCOPE OF WORK FOR A RCRA

FACILITY INVESTIGATION

ILD074424938

LPC #0311860003

Part B Log #113

Scope of Work for a RCRA Facility Investigation
Detrex Corporation
ILD074424938
LPC #0311860003
Part B Log #113

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) of the solid waste management units identified in Section III of the RCRA Permit, which the Permittee is required to perform under the terms of their RCRA permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Detrex Corporation and "SWMU" refers to Solid Waste Management Unit.

I. PURPOSE

The purpose of the RFI is to determine the nature, the rate and extent of migration, and the concentrations of hazardous waste or hazardous constituents, if any, released from SWMU's into the groundwater, surface water, sediments, soil and air. This information will be used to help determine the need, scope and design of a corrective action program.

II. SCOPE OF WORK

The Scope of Work is divided into two phases. The purpose of Phase I is to demonstrate conclusively whether or not any releases of hazardous wastes or hazardous constituents have occurred from those SWMUs identified in Section III of the RCRA permit. Phase II will be implemented if the Agency's DLPC determines from the data obtained from Phase I that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive. The purpose of Phase II is to characterize the extent and rate of migration and concentration of the hazardous waste or hazardous constituents and to implement interim corrective action measures, if it is determined by the Agency's DLPC to be necessary. Each phase of the investigation is divided into three subparts. The first subpart deals with the development by the Permittee of a RFI Workplan. The second subpart addresses the implementation of the RFI. The final subpart covers the submission of reports of activities and results of the RFI. The requirements for the three subparts are as follows.

III. RFI WORKPLANS

The Permittee shall prepare a detailed workplan for Phase I implementation as per the schedule in this Attachment of the permit. The Phase II Workplan shall be submitted upon written request by the Agency's DLPC.

The plans shall contain at a minimum the following information. Information provided by the Phase I study may be incorporated into the Phase II Workplan by reference. Information already submitted in the Part B permit application may be incorporated by reference into both workplans when appropriate.

A. FACILITY BACKGROUND

The Permittee shall submit as part of the RFI Phase I Workplan the following information:

1. Delineate the extent and construction of the SWMUs;
2. Describe the history of the utilization of the SWMUs and the surrounding areas;
3. Describe all materials managed and/or disposed at the SWMUs including, but not limited to, solid wastes, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility;
4. Describe all significant surface features (ponds, streams, depressions, etc.) and wells within 1,500 feet of the facility;
5. Describe all land usage within 1,500 feet of the facility, including all known SWMUs;
6. Describe and locate all human populations and environmental systems susceptible to contaminant exposure from releases from the SWMUs within a distance of at least 1,500 feet;
7. Describe any interim corrective action measures which were or are being planned or undertaken at the facility;
8. A history and description of past and present ownership and operation of solid and hazardous waste generation, storage, treatment and disposal activities at the facility;
9. Approximate dates or periods of past spills or releases, identification of material spilled, amount spilled, location, and a description of the response actions, including any inspection reports or technical reports generated as a result of the spill or release.

B. SITE MAP

The Permittee shall submit as part of the draft RFI Phase I Workplan a current topographic map(s) showing a distance of at least 1,500 feet around the facility at a scale of one inch equal to not more than 200 feet. Contours shall be shown on the map, with the contour interval being sufficient to clearly show the pattern of surface water flow. The map shall clearly show the following:

1. Map scale, North arrow, date, and location of facility with respect to Township, Range and Section;
2. Topography and surface drainage depicting all waterways, wetlands, 100-year floodplain, drainage patterns, and surface water areas;
3. Property lines, with the owners of all adjacent property clearly indicated;
4. Surrounding land use;
5. Locations and boundaries of all solid waste, including hazardous waste, management units, both past and present;
6. All injection and withdrawal wells; and
7. All buildings, tanks, piles, utilities, paved areas, easements, rights-of-way, and other features including all known past and present product and waste underground tanks or piping.

The map(s) shall be of sufficient detail and accuracy to locate and report all current and future work performed at the site.

C. NATURE AND EXTENT OF CONTAMINATION

The Permittee shall submit as part of the RFI Phase I Workplan, a description of the existing information on the nature and extent of contamination at the facility.

1. The Permittee's report shall summarize all possible source areas of contamination. At a minimum, this should include all regulated units, solid waste management units, spill areas, and

other suspected source areas of contamination. For each area the Permittee shall identify the following:

- a. Location of unit/area;
 - b. Quantities of solid and hazardous wastes;
 - c. Hazardous waste and hazardous constituents, to the extent known; and
 - d. Identification of areas where additional information is necessary.
2. The Permittee shall prepare an assessment and description of the existing degree and extent of contamination based on existing information. This should include:
- a. Available monitoring data and qualitative information on locations and levels of contamination at the facility;
 - b. All potential migration pathways including relevant information on geology, pedology, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality; and
 - c. The potential impact on human health and the environment, including demography, groundwater and surface water uses, and land use.

D. ADMINISTRATIVE OUTLINE

The Permittee shall submit as part of the RFI Phase I Workplan a general outline of the Phase I Workplan defining the RFI objectives, technical approach, and scheduling of tasks. The Permittee shall prepare a Project Management Plan as part of the Phase I Workplan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RFI. In order to show progressional scheduling of tasks, a bar chart format must be provided, with day zero as the approval date of the Workplan. An equivalent outline shall be prepared for the Phase II Workplan if one is required by the Agency's DLPC.

E. SITE-SPECIFIC SAMPLING PLANS-PHASE I and PHASE II

The Permittee shall prepare detailed site-specific sampling plans which address all field activities needed to obtain site-specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever possible, SW-846 (Third Edition) sampling, analysis and statistical methods shall be utilized. The plans must address all levels of the investigations, as well as types of investigations conducted, and must include groundwater, soils and sediments, air, and surface water sampling. The plans must describe in detail how each phase will be implemented. The Phase I Sampling Plan must be able to determine the presence or absence of specific hazardous waste or hazardous constituents released to the environment and must also describe the criteria that will be used to determine the presence or absence of releases. This Phase I Sampling Plan shall be submitted as part of the RFI Phase I Workplan. The Phase II Sampling Plan must be able to determine the nature, rate and extent, and concentrations of those hazardous wastes and hazardous constituents that have been found to have been released to the environment in the Phase I Study.

The Phase I Sampling Plan must include provisions for sampling and analysis of all hazardous wastes and hazardous constituents, either suspected or known to have been disposed, treated or stored in those units identified in Section III of the permit. The Phase II Plan must, at a minimum, provide for sampling and analysis of all hazardous wastes and hazardous constituents identified as being released in Phase I. The specific constituents to be sampled and analyzed will be determined separately for each affected SWMU.

1. Soils Investigation

- a. The Phase I Plan must provide for a determination of the presence or absence of release of hazardous waste and hazardous constituents into the soil around and under the SWMUs. The plan must include, but is not limited to:

- (1) A description and characterization of the soils in and around the SWMUs down to the water table including, but not limited to, the following:

- (a) Unified soil classification;
 - (b) Soil profile; and
 - (c) Elevation of water table;

- (2) The parameters and hazardous constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (3) The basis for selecting the parameters and constituents in (2) above;
 - (4) The methodology for choosing sampling locations, depths, and numbers of samples;
 - (5) Sampling procedures for each parameter or constituent to be analyzed. All soil samples to be taken must be handled in accordance with 40 CFR 261, Appendix III and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed;
 - (6) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods must be provided, and
 - (7) Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.
- b. If the Agency's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred, or the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the soil. This workplan shall address and/or include, at a minimum:
- (1) A description of what is known about the horizontal and vertical extent of the contamination;
 - (2) A description of contaminant and soil chemical properties within the contaminant source area and plume, including solubility, specification,

absorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation (if known);

- (3) Specific contaminant concentrations (if known);
- (4) The velocity and direction of contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The methods and criteria to be used to define the boundaries of the plume(s) of contamination.

2. Hydrogeologic and Hydrologic Investigation

The Phase II sampling plan, if required, must provide descriptions of groundwater monitoring systems which will be capable of (1) determining whether or not any releases have occurred from the SWMUs and (2) will provide adequate data on the nature, extent and rate, and concentration of any releases identified.

Ground water monitoring will not be required for a SWMU if the permittee can demonstrate, based on the soils investigations in Section 1 above, that no releases have occurred from the SWMU (as determined by the Agency's DLPC). If releases are determined to have occurred at a particular unit, then the Phase II workplan may have to address a hydrological investigation, including groundwater monitoring at that unit. The Permittee will be notified of the requirement to perform a hydrological investigation and groundwater monitoring for a specific SWMU at the time the Agency notifies the Permittee that a Phase II Workplan is required.

Phase II groundwater monitoring efforts, if required, shall begin with a survey of previous hydrogeologic studies and other existing related data. The results of the survey shall be summarized in the Phase II report and summary.

- a. Except to the extent that adequate existing hydrogeologic data already exist which can be used in the investigation,

a plan for evaluating groundwater flow patterns shall be designed to provide the following information:

- (1) A description of the regional geologic and hydrogeologic characteristics in the vicinity, including local stratigraphy, regional hydrogeologic flow and areas of recharge and discharge;
- (2) An analysis of any topographic or geomorphic features that might influence the groundwater flow system;
- (3) A classification and description of the hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; an interpretation of hydraulic interconnections between saturated zones; and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;
- (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
- (5) A description of water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and
- (6) A description of any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures.

- b. Sampling and analysis of all wells shall be carried out in accordance with the approved Data Collection Quality Assurance Plan as required in III.F. below. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD) and the latest version of the Agency's DLPC design criteria. At a minimum:
- (1) The groundwater monitoring system must consist of monitoring wells in the uppermost aquifer and in each underlying aquifer, such as the sand units, which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMU, except to the extent SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are:
 - (a) representative of background quality in the uppermost aquifer and aquifers hydraulically interconnected beneath the facility; and
 - (b) not affected by any SWMUs.
 - (3) Monitoring wells in each aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations, and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous constituents that migrate from the SWMU(s).
- c. The sampling plan must specify:
- (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in or released from the SWMUs (including any possible degradation products);

- (2) The basis for selecting the parameters and constituents in (1) above;
- (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths and concentration specifications for each monitoring well to be used in the initial sampling effort;
- (4) Sampling procedures for each parameter or constituent to be analyzed, including schedules for sampling;
- (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
- (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- (7) Proposal for establishing the locations, depths, and construction specifications for monitoring wells necessary to delineate the extent of any plume. The methodology of the investigation, sampling procedures, analytical methods, and procedures for evaluating analytical results to establish the extent of the plume must be described. The workplan must also specify the criteria to be used to determine the limits of the plume.

3. Surface Water and Sediment

- a. The Phase I Workplan must provide for a determination of the presence or absence of releases of hazardous wastes and hazardous constituents into all surface waters or their sediments potentially affected by the SWMUs. A determination of "no impact" must be justified and documented to the satisfaction of the Agency's DLPC. The plan must include, but is not limited to:
 - (1) Description and characterization of all potentially affected surface waters, including locations, areas,

depths, inflows and outflows, volumes of water, seasonal fluctuations, flooding tendencies, drainage patterns, on-site and off-site affected populations and activities;

- (2) Description and characterization of sediment characteristics associated with all surface waters, including deposition areas, thickness profiles, and physical and chemical parameters;
 - (3) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. This must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
 - (4) The basis for selecting the parameters and constituents in (3) above;
 - (5) The methodology for choosing sampling locations depths, and numbers of samples;
 - (6) Sampling procedures for each parameter of constituent to be analyzed;
 - (7) Analytical methods to be used in the analysis of the samples. If any of these methods are not identical to those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the SW-846 methods will be provided; and
 - (8) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.
- b. If the Agency's DLPC determines from the data obtained during the Phase I investigation that releases of hazardous waste or hazardous constituents have occurred or that the data is inconclusive, the Permittee shall submit a Phase II Workplan to characterize the contamination of the surface waters and sediments. The workplan shall include, at a minimum:
- (1) A description of the horizontal and vertical extent of any plumes and the extent of contamination in the underlying sediments (if known);

- (2) Specific contaminant concentrations (if known);
- (3) The horizontal and vertical direction and velocity of contaminant movement (if known);
- (4) An evaluation of the physical, biological, and chemical factors influencing contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The criteria used to define the boundaries of the plumes.

4. Air

- (a) The Phase I Workplan must provide for an investigation to characterize the particulate and gaseous contaminants released into the atmosphere. A determination of "no impact" must be justified and documented to the satisfaction of the Agency's DLPC. This investigation shall provide the following information:
 - (1) A description of the horizontal and vertical direction and velocity of contaminant movement;
 - (2) The rate and amount of release; and
 - (3) The chemical and physical composition of the contaminants released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

- (b) The Phase I Workplan must provide for characterizing the climate in the vicinity of the facility. Such information shall include, but not be limited to:
 - (1) A description of the following parameters:
 - (a) Annual and monthly rainfall averages;
 - (b) Monthly temperature averages and extremes;

- (c) Wind speed and direction;
 - (d) Relative humidity and dew point;
 - (e) Atmospheric pressure;
 - (f) Evaporation data;
 - (g) Development of inversions; and
 - (h) Climate extremes that have been known to occur in the vicinity of the facility, and the frequency of occurrence.
- (2) A description of topographic and manmade features which affect air flow and emission patterns, including:
- (a) Ridges, hills or mountain areas;
 - (b) Canyons or valleys;
 - (c) Surface water bodies;
 - (d) Wind breaks and forests;
 - (e) Buildings; and
 - (f) Other man-made features.

5. Source Characterization

The Phase I Workplan must provide for the collection of analytical data to completely characterize the hazardous wastes and/or hazardous constituents and the areas where hazardous wastes and/or hazardous constituents have been released, placed, collected or removed including: type, quantity, physical form, disposition (containment or nature of deposits); and facility characteristics affecting releases. This shall include quantification of the following specific characteristics at each source area:

- a. Unit/Disposal Area Characteristics:
- (1) Location of unit/disposal area;
 - (2) Type of unit/disposal area;

- (3) Design features;
- (4) Operating practices (past and present);
- (5) Period of operation;
- (6) Age of unit/disposal area;
- (7) General physical conditions;
- (8) Structural integrity (cracks, joints, gaps, patches, maintenance history, etc.); and
- (9) Method used to close the unit.

b. Waste or Hazardous Constituent Characteristics

- (1) Type of waste or hazardous constituents placed in the units:
 - (a) Source, if known;
 - (b) Hazardous classification;
 - (c) Quantity; and
 - (d) Chemical composition.
- (2) Physical and chemical characteristics:
 - (a) Physical form (solid, liquid, gas);
 - (b) Physical description;
 - (c) Temperature;
 - (d) pH;
 - (e) General chemical class (e.g. acid, solvent);
 - (f) Molecular weight;
 - (g) Density;
 - (h) Boiling point;

- (i) Viscosity;
 - (j) Solubility in water;
 - (k) Cohesiveness of the waste;
 - (l) Vapor pressure; and
 - (m) Flash point.
- (3) Migration and dispersal characteristics of the waste:
- (a) Sorption;
 - (b) Biodegradability, bioconcentration;
 - (c) Photodegradation rates;
 - (d) Hydrolysis rates; and
 - (e) Chemical transformations.

The Permittee shall justify and document the procedures used in making the above determinations.

6. Potential Receptors

The Phase I Workplan must provide for collection of data describing the human populations and environmental systems within a radius of 1,500 feet of the facility boundary. The following characteristics shall be identified:

- a. Local uses and possible future uses of groundwater:
 - (1) Type of use (e.g. municipal or residential drinking water source, industrial, etc.); and
 - (2) Location of groundwater users, including wells and discharge areas.
- b. Local uses and possible future uses of surface waters draining the facility:
 - (1) Domestic and municipal;
 - (2) Recreational;

- (3) Agricultural;
 - (4) Industrial; and
 - (5) Environmental.
- c. Human use of, or access to, the facility and adjacent lands, including, but not limited to:
- (1) Recreation;
 - (2) Agriculture;
 - (3) Residential;
 - (4) Commercial;
 - (5) Zoning; and
 - (6) Location between population locations and prevailing wind direction.
- d. A description of the biota in surface water bodies on, adjacent to, or affected by the facility.
- e. A description of ecology of, and adjacent to the facility.
- f. A demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age, sex, and sensitive subgroups.
- g. A description of any endangered or threatened species near the facility.

F. DATA COLLECTION QUALITY ASSURANCE

The Permittee shall prepare a plan to document all monitoring procedures, sampling, field measurements, and sample analysis performed during the investigation so as to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented. This shall be submitted with the RFI Phase I Workplan.

Quality Assurance. Sampling methods and equipment, as well as laboratory analytical methods, shall follow guidance in U.S. EPA's SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (see 40 CFR 260.11). Field sampling methods, including soil sampling, not included in SW-846 must be approved by the Agency's DLPC before they are used in the RFI. This includes methods such as drilling, borings, etc. When available, standard procedures, as defined by U.S. EPA, IEPA or ASTM, should be followed. All soil samples which are to be taken must be handled in accordance with 40 CFR, Part 261, Appendix III and the Agency's soil volatile sampling procedures if volatile sampling is required. The analytical methods which will be used must be specified and must be EPA-approved.

Soil samples for volatile organics analysis require specialized sampling and handling procedures. Under no circumstances should soil samples for volatile organic analysis be mixed, composited or otherwise aerated.

G. DATA MANAGEMENT PLAN

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation. This shall be submitted with the RFI Phase I Workplan.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID number;
- e. Property or component measured; and
- f. Result of analysis.

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium and for each constituent monitored;
- c. Statistical analysis;
- d. Sorted data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

- a. Sampling location and sampling grid;
- b. Boundaries of sampling area, and areas where more data are required;
- c. Levels of contamination at each sampling location;
- d. Extent of contamination;
- e. Changes in concentrations in relation to the distance from the source, time, depth or other parameters; and
- f. Features affecting intermedia transport including potential receptors.

H. IMPLEMENTATION OF INTERIM MEASURES

The Permittee shall document and submit information on any interim measures which have been or are to be undertaken to abate threats to human health and the environment while the RFI or CAP are being completed. This information shall include, at a minimum:

1. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long term solution at the facility;

2. Design, construction, and maintenance requirements;
3. Schedules for design and construction; and
4. Schedules for progress reports.

If the Agency determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

I. HEALTH AND SAFETY PLAN

Under the provisions of 29 CFR 1910 (54 FR 9,295, March 6, 1989), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

IV. IMPLEMENTATION OF RFI

The Permittee shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s) and the RFI schedule. Any actual or anticipated deviations from the Workplan(s) or the RFI schedule shall be reported no later than the time of submission of the next quarterly report subsequent to the determination of need or actual deviation from the Workplan.

V. SUBMISSION OF REPORTS AND RESULTS OF RFI ACTIVITIES

The Permittee must prepare and submit quarterly progress reports and a final report on the activities and results of the Phase I RFI activities and, if required, Phase II RFI activities. The quarterly reports shall contain at a minimum:

- A. An estimate of the percentage of the investigation completed;
- B. Summary of activities completed during the reporting period;
- C. Summaries of all actual or proposed changes to the Workplan or its implementation;
- D. Summaries of all actual or potential problems encountered during the reporting period;
- E. Proposal for correcting any problems;
- F. Projected work for the next reporting period; and
- G. Other information or data as requested in writing by the Agency's DLPC.

The primary objective of the Phase I final report is to conclusively determine either the presence or absence of releases of hazardous waste or hazardous constituents to the groundwater, surface water, air, sediments, and soil. If it is determined by the Agency's DLPC that there have been no releases, the Agency's DLPC may recommend that further investigation is not needed. If the evidence is either inconclusive or confirms a release, the Agency's DLPC will require Phase II of the plan be implemented. The final report of Phase II will be required to document the extent, rate and type of contamination at the site. The results of both phases of the investigation must be of sufficient content and quality to support and develop a corrective action program if one is deemed necessary by the Agency's DLPC. The Agency's DLPC will provide comments on all final draft reports. The final reports must adequately address these comments. The following table summarizes the implementation and reporting schedule to be followed by the Permittee.

RFI IMPLEMENTATION SCHEDULE

Facility Action	Due Date
Submission of RFI Phase I Workplan	Within 90 days after effective date of the permit
Completion of RFI Phase I investigation and submission of Phase I Report and Summary	Within 6 months after approval by the Agency's DLPC of Phase I Workplan
Submission of RFI Phase II Workplan	Within 60 days after notification of the need of Phase II by Agency's DLPC
Completion of RFI Phase II investigation and submission of Phase II Report and Summary	To be negotiated with the Agency's DLPC during review of Phase II workplan
Quarterly Progress Reports	Due to the <u>Agency's DLPC by:</u> April 15 July 15 October 15 January 15 of each year
Submission of Implementation of Interim Measures Report	Within 30 days from the date interim measures were determined to be necessary

AD:lat/sp/1518q,1-79

**STATEMENT OF BASIS FOR
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (U.S. EPA)
DRAFT RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT FOR
DETREX CORPORATION, GOLD SHIELD SOLVENTS
MELROSE PARK, ILLINOIS
ILD 074 424 938**

RCRA PERMITS

In 1976, the Resource Conservation and Recovery Act (RCRA) amended the Solid Waste Disposal Act, 42 U.S.C. §6901 et seq., to require certain facilities engaged in treating, storing, or disposing of hazardous waste to have a permit for such activities. In 1984, the Solid Waste Disposal Act was again amended by the Hazardous and Solid Waste Amendments (HSWA). The 1984 legislation contains additional permitting requirements and also provides authority to the U.S. EPA to establish permit conditions for hazardous waste facilities beyond the scope of existing regulations, if necessary, to protect human health and the environment.

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271 to administer the pre-HSWA RCRA hazardous waste program. The State has subsequently been authorized to also administer individual provisions of HSWA. Because the State of Illinois has not yet received authorization to administer all of the HSWA requirements, additional permit conditions must be issued by the U.S. EPA to address the remaining HSWA requirements. These conditions are contained in the U.S. EPA issued permit, which together with the State of Illinois permit constitute the RCRA permit.

U.S. EPA PERMIT DECISION PROCEDURES

Section 7004(b) of RCRA, 42 U.S.C. §6974, and 40 CFR 124.10 and 124.11 require that the public be given a 45-day comment period for each draft permit issued under RCRA. The comment period begins on the date of publication of the public notice in a major local newspaper of general circulation. Any person interested in submitting comments on the draft permit must do so within this 45-day comment period.

As specified in 40 CFR 124.11 and 124.12, a public hearing will be held whenever a request for a public hearing is received during the 45-day public comment period. The request must be in writing and must state the nature of the issues proposed to be raised in the hearing. An announcement will be published in the legal notice section of a major or local newspaper, identifying the date, time and location of the hearing. Any person may submit oral or written statements and data concerning the draft permit at the hearing. The public comment period is extended to at least the close of the public hearing. All comments will be considered in making the final permit decision.

As specified in 40 CFR 124.15 and 124.17, after the close of the public comment period, the U.S. EPA will issue a final permit decision. Each person who has submitted written comments, given oral testimony at the hearing, or

requested notice of the final permit decision shall be notified of the U.S. EPA's decision. This notice will include references to procedures for appealing the decision, and will contain the U.S. EPA's response to all significant comments to the draft permit received from the public. The notice will also specify which provisions, if any, of the draft permit have been changed in the final permit and the reasons for the changes. Any new issues raised or submissions received during the public comment period will be entered into the administrative record.

Because the RCRA draft permit is being issued jointly by the State of Illinois and the U.S. EPA, and in order to consolidate the processing of information submitted by the public, all comments regarding the draft permit and requests for a public hearing should be submitted in writing to:

Illinois Environmental Protection Agency
Government and Community Affairs 5
Attn: RCRA Public Involvement Coordinator
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

The U.S. EPA contact for this permit is Robert Fuhrer, who may be reached at (312) 353-4889.

BRIEF SUMMARY OF PERMIT CONDITIONS

This section provides a brief summary of the draft permit conditions. All citations in the Basis refer to the regulations codified in Title 40 of the Code of Federal Regulations (40 CFR).

<u>Permit condition</u>	<u>Subject</u>	<u>Basis</u>
I.A.	Effect of Permit	270.4 270.30(g)
I.B.	Permit Actions	270.30(f)
I.C.	Severability	124.16
I.D.1.	Duty to Comply	270.30(a)
I.D.2.	Duty to Reapply	270.30(b) 270.10(h)
I.D.3.	Permit Expiration	270.13 270.14 270.50 270.51
I.D.4.	Need to Halt or Reduce Activity Not a Defense	270.30(c)

I.D.5.	Duty to Mitigate	270.30(d)
I.D.6.	Proper Operation and Maintenance	270.30(e)
I.D.7.	Duty to Provide Information	270.30(h) 264.74
I.D.8.	Inspection and Entry	270.30(i)
I.D.9.	Monitoring and Recordkeeping	270.30(j) 270.31 264.73 264.74
I.D.10.	Reporting Planned Changes	270.30(1)(1)
I.D.11.	Anticipated Noncompliance	270.30(1)(2)
I.D.12.	Transfer of Permits	270.30(1)(3) 270.40(a) 264.12(c)
I.D.13.	Compliance Schedules	270.30(1)(5) 270.33
I.D.14.	Twenty-four Hour Reporting	270.30(1)(6) 270.33
I.D.15.	Other Noncompliance	270.30(1)(10)
I.D.16.	Other Information	270.30(1)(11)
I.D.17.	Submittal of Reports or Other Information	270.30(1)(7),(8),(9) 270.31
I.D.18.	Other Requirements	270.30
I.E.	Signatory Requirement	270.30(k)
I.F.	Confidential Information	270.12
I.G.	Documents to be Maintained at the Facility	264.73
II.A.	Land Disposal Requirements: General Conditions	268.1 268.3 268 Subparts B and C
II.B.	Testing and Related Requirements	268.7 268 Subparts C and D 264.13

II.C.	Storage Prohibitions	268 Subpart E 268.32 761.65(b)
III.	Toxicity Characteristic:	261.24
IV.A.	Air Emission Standards: Process Vents	264 Subpart AA
IV.B.	Equipment Leaks	264 Subpart BB
IV.C.	Recordkeeping	264.1035 264.1036 264.1064 264.1065
IV.D.	Notification of Regulated Activity	270.30(1)(1)
IV.E.	Duty to Comply with Future Requirements	270.30(a)
V.	Schedule of Compliance	270.30(1)(5) 270.33

Module I. of the permit contains standard conditions which are part of every RCRA permit. These conditions address general requirements related to the implementation of the permit.

Module II. addresses the land disposal prohibitions for hazardous wastes mandated by HSWA. While the Permittee is not allowed to dispose of hazardous waste at the facility, it does send such waste off-site for treatment and disposal. These provisions require the Permittee to comply with the applicable testing and storage requirements for these wastes.

Module III. allows the Permittee to store Toxicity Characteristic (TC) hazardous waste according to the state regulations and requires the Permittee to utilize the Toxicity Characteristic Leaching Procedure in lieu of the original Extraction Procedure when necessary to make a determination as to whether a solid waste exhibits the TC.

Module IV. requires the Permittee to comply with recent requirements regarding air emissions from certain process vents and from equipment leaks related to hazardous waste tank operations. The facility presently does not have any units to which these regulations apply. However, should the facility utilize such units in the future, they would have to comply with these HSWA required air emission regulations.

Module V. sets a compliance schedule for the facility to notify the U.S. EPA should it utilize any units subject to the air emission regulations identified in Module IV.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
HAZARDOUS WASTE MANAGEMENT PERMIT**

Name of Permittee: Detrex Corporation, Gold Shield Solvents

Facility Location: **Street Address:** 2537 LeMoyne Avenue
City, State: Melrose Park, Illinois 60160

EPA Identification Number: ILD 074 424 938

Effective Date: (35 days after signature)

Expiration Date: (Ten years after the effective date)

Authorized Activities:

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, (42 U.S.C. §6901, et seq.), and regulations promulgated thereunder by the United States Environmental Protection Agency (U.S. EPA) (codified in Title 40 of the Code of Federal Regulations (40 CFR)), Federal permit conditions (hereinafter called the permit) of the RCRA permit are issued to Detrex Corporation, Gold Shield Solvents (hereinafter called the Permittee), for the facility located in Melrose Park, Illinois.

The RCRA permit contains both the effective Federal permit conditions (contained herein) and the effective State permit conditions issued by the State of Illinois RCRA program authorized under 40 CFR Part 271 (hereinafter called the State permit). When both this permit and the State permit are effective, the Permittee has an effective RCRA permit which authorizes the Permittee to conduct hazardous waste management activities as specified in the RCRA permit.

Permit Approval:

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. On April 30, 1990, the State of Illinois also received authorization to administer certain specific portions of the hazardous waste program required under HSWA. Those conditions for which the State has not yet been authorized to administer must be issued by the U.S. EPA. These additional conditions are contained in this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260, 261, 262, 264, 266, 268, 270, and 124, and applicable provisions of HSWA.

This permit is based on the assumption that the information submitted in the permit application, dated November 7, 1988, and in any subsequent amendments (hereinafter referred to as the application), is accurate. Any inaccuracies found in this information may be grounds for the termination, revocation and reissuance, or modification of this permit (see 40 CFR 270.41, 270.42 and 270.43) and potential enforcement action. The Permittee must inform the U.S. EPA of any deviation from or changes in the information in the submitted application as soon as the Permittee becomes aware of such deviation or changes.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after service of notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Administrator to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR 124.19.

Effective Date:

The RCRA permit is effective when both this permit and the State permit are effective. This permit is effective as of the effective date specified on the previous page, unless a review is requested under 40 CFR 124.19. The permit shall remain in effect until the expiration date, unless revoked and reissued, or terminated (40 CFR 270.41, 270.42, and 270.43), or continued in accordance with 40 CFR 270.51.

Issued this _____ day of _____,

by _____.

David A. Ullrich, Director
Waste Management Division

**Detrex Corp., Gold Shield Solvents
Melrose Park, Illinois**

PERMIT INDEX

PERMIT CONDITIONS:

- I. Standard Conditions
- II. Land Disposal Requirements
- III. Toxicity Characteristic
- IV. Air Emission Standards
- V. Schedule of Compliance

PERMIT CONDITIONS

(Note: The regulatory citations in parentheses are incorporated by reference.)

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT (40 CFR 270.4 and 270.30(g))

The Permittee is allowed to manage hazardous waste in accordance with the conditions of the RCRA permit. Any management of hazardous waste not authorized in the RCRA permit is prohibited.

Compliance with the RCRA permit during its term constitutes compliance, for the purposes of enforcement, with Subtitle C of RCRA, except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR Part 268, restricting the placement of hazardous waste in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS (40 CFR 270.30(f))

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. This permit may also be reviewed and modified at any time by the U.S. EPA to include any terms and conditions determined necessary to protect human health and the environment pursuant to Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY (40 CFR 124.16)

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS1. Duty to Comply. (40 CFR 270.30(a))

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit (See 40 CFR 270.61). Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and HSWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, denial of a permit renewal application, or other appropriate action.

2. Duty to Reapply. (40 CFR 270.30(b) and 270.10(h))

The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee no longer wishes to operate a hazardous waste management facility; b) the Permittee is no longer required to have a RCRA permit; or c) permission for a later date has been granted by the Regional Administrator. The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

3. Permit Expiration. (40 CFR 270.13, 270.14, 270.50, and 270.51)

This permit and all conditions herein shall be effective for a fixed term not to exceed 10 years, and will remain in effect beyond the permit's expiration date only if the Permittee has submitted a timely, complete application (per 40 CFR 270.10 and applicable sections of 270.14 through 270.29): a) to both the U.S. EPA and the State; and b) through no fault of the Permittee, the Regional Administrator and the State have not issued a new permit, as set forth in 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense. (40 CFR 270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. (40 CFR 270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment.

6. Proper Operation and Maintenance. (40 CFR 270.30(e))

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. (40 CFR 270.30(h) and 264.74)

The Permittee shall furnish to the Regional Administrator, within the time designated by the Regional Administrator, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. (40 CFR 270.30(i))

The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Recordkeeping. (40 CFR 270.30(j), 270.31, 264.73, and 264.74)

The Permittee shall retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records or other documents. Corrective Action records must be maintained at least 3 years after all Corrective Action activities have been completed. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

10. Reporting Planned Changes. (40 CFR 270.30(1)(1))

The Permittee shall give notice to the Regional Administrator of any planned physical alterations or additions to the permitted facility, as soon as possible, and at least 30 days before construction of such alteration or addition is commenced.

11. Anticipated Noncompliance. (40 CFR 270.30(1)(2))

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

12. Transfer of Permits. (40 CFR 270.30(1)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Regional Administrator and only if the permit is modified, or revoked and reissued, pursuant to 40 CFR 270.40(b), 270.41(b)(2), or 270.42(a). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264, 268, and 270 (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

13. Compliance Schedules. (40 CFR 270.30(1)(5) and 270.33)

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Regional Administrator no later than 14 days following each scheduled date.

14. Twenty-four Hour Reporting. (40 CFR 270.30(1)(6) and 270.33)

The Permittee shall report to the Regional Administrator any noncompliance with this permit which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
- b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the 5-day written notice requirement if the Regional Administrator waives the requirement. Upon waiver of the 5-day requirement, the Permittee shall submit a written report within 15 days of the time the Permittee becomes aware of the circumstances.

15. Other Noncompliance. (40 CFR 270.30(1)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within 15 days of when the Permittee becomes aware of the noncompliance. The reports shall contain the information listed in Condition I.D.14.

16. Other Information. (40 CFR 270.30(1)(11))

Whenever the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information to the Regional Administrator in the permit application or in any reports, records, or other documentation provided to the Regional Administrator, the Permittee shall promptly submit such facts or information.

17. Submittal of Reports or Other Information. (40 CFR 270.30(1)(7), (8), and (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

RCRA Permitting Branch, 5HR-13
Waste Management Division
U.S. EPA, Region V
230 South Dearborn Street
Chicago, Illinois 60604

Attention: Illinois Section

18. All other requirements contained in RCRA, as amended, and in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.

E. SIGNATORY REQUIREMENT (40 CFR 270.30(k))

All reports or other information submitted to or requested by the Regional Administrator, his designee, or authorized representative, shall be signed and certified as required by 40 CFR 270.11.

F. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12 and 40 CFR Part 2, Subpart B, any information submitted to the U.S. EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or, in the case of other submissions, by marking the words "Confidential Business Information" on each page containing such information.

If no claim is made at time of submission, the U.S. EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2.

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, all items required by 40 CFR 264.73, including the following documents and all amendments, revisions, and modifications to these documents:

1. Waste Analysis Plan, as required by 40 CFR 264.13 and this permit;
2. Operating Record, as required by 40 CFR 264.73 and this permit;
3. Notifications from generators accompanying each incoming shipment of wastes subject to 40 CFR Part 268, Subtitle C, that specify treatment standards, as required by 40 CFR 264.73, 268.7, and this permit;
4. Records regarding closed-vent systems and control devices and/or equipment leaks as required 40 CFR 264.1035, 264.1064, and 264.73, and Condition V.C. of this permit.

II. LAND DISPOSAL REQUIREMENTS

A. GENERAL CONDITIONS

1. The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by statute (Section 3004 of RCRA).
2. A mixture of any restricted waste with nonrestricted waste(s) is a restricted waste under 40 CFR Part 268.
3. The Permittee shall not in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR Part 268, Subpart D, to circumvent the effective date of a prohibition in 40 CFR Part 268, Subpart C, to otherwise avoid a prohibition in 40 CFR Part 268, Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.
4. The Permittee shall prepare and maintain a current list of the hazardous waste codes handled by the facility that are identified in 40 CFR 268, Subparts B and C. The list shall include all waste codes handled by the facility, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list shall be provided to the U.S. EPA representatives, or their designees, upon request.

B. TESTING AND RELATED REQUIREMENTS

1. The Permittee must test, in accordance with 40 CFR 268.7(a), any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
2. For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 CFR 268.41, the Permittee shall test the treatment residues, or an extract of such residues developed using the test methods described in Appendix I of 40 CFR Part 268 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the treatment residues or extract meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
3. For restricted wastes under 40 CFR 268.32 or Section 3004(d) of RCRA, which are not subject to any treatment standards under 40 CFR Part 268, Subpart D, the Permittee shall test the treatment residues according to the generator requirements specified under 40 CFR 268.32 to assure that the treatment residues comply with the applicable prohibitions of 40 CFR Part 268, Subpart C. Such testing shall be performed as required by 40 CFR 264.13.
4. A restricted waste for which a treatment technology is specified under 40 CFR 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in 40 CFR 268.42(b).
5. For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 CFR 268.43, the Permittee shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
6. The Permittee shall comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR 268.7(a) and (b).

C. STORAGE PROHIBITIONS

1. The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268, Subpart E.
2. Except as otherwise provided in 40 CFR 268.50, the Permittee may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal provided that:

- a. Each container is clearly marked to identify its contents and the date each period of accumulation begins; and
 - b. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility.
3. The Permittee may store restricted wastes for up to 1 year unless the U.S. EPA or its authorized agent can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
 4. The Permittee may store restricted wastes beyond 1 year; however, the Permittee bears the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
 5. The Permittee shall not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR 761.65(b). This waste must be removed from storage and treated or disposed as required by 40 CFR Part 268 within 1 year of the date when such wastes are first put into storage. Condition II.C.4. above, that allows storage for over 1 year with specified demonstration, does not apply to PCB wastes prohibited under 40 CFR 268.32.

III. TOXICITY CHARACTERISTIC

A. WASTE IDENTIFICATION

The Permittee may store the following wastes in the container storage area identified in the State permit, subject to the terms of the RCRA permit (including the container storage area capacity specified in the State permit) and as follows:

<u>Description of Hazardous Waste</u>	<u>EPA Hazardous Waste Number</u>	<u>Description of Unit(s)</u>
Mixed non-halogenated products (spent solvents)	D012-D043	Container Storage Area
Mixed halogenated products (spent solvents)	D012-D043	Container Storage Area

B. WASTE CHARACTERIZATION

The Permittee must use the Toxicity Characteristic Leaching Procedure (TCLP) (Appendix II of 40 CFR Part 261), or use knowledge of the waste to determine whether a waste exhibits the characteristic of toxicity, as defined in 40 CFR 261.24. Use of the TCLP does not exempt the Permittee from also using the Extraction Procedure (EP) toxicity test if required by the State permit conditions.

C. CONDITIONS REGARDING UNITS

All units described in Condition III.A. above shall be operated in accordance with the State permit conditions pertaining to those units.

IV. AIR EMISSION STANDARDS

A. PROCESS VENTS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart AA, regarding air emission standards for process vents.

B. EQUIPMENT LEAKS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment leaks.

C. RECORDKEEPING

The Permittee shall comply with all applicable recordkeeping and reporting requirements described in 40 CFR 264.1035, 264.1036, 264.1064, and 264.1065.

D. NOTIFICATION OF REGULATED ACTIVITY

The Permittee shall notify the Regional Administrator of any waste management units which become subject to the requirements of 40 CFR Part 264, Subparts AA and BB, within 30 days of startup of the regulated activity.

E. DUTY TO COMPLY WITH FUTURE REQUIREMENTS

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 3004(n) of RCRA, as amended by HSWA.

V. SCHEDULE OF COMPLIANCE

Air Emission Regulations

Due Date

Notification of waste management units subject to the requirements of 40 CFR Part 264, Subparts AA and BB.

30 days after startup of the activity.